



United States
Department of
Agriculture



NRCS

Natural
Resources
Conservation
Service and
Forest Service



In cooperation with
Michigan Department of
Agriculture, Michigan
Agricultural Experiment
Station, Michigan State
University Extension, and
Michigan Technological
University

Soil Survey of Gogebic County, Michigan



How To Use This Soil Survey

General Soil Map

The general soil map, which is a color map, shows the survey area divided into groups of associated soils called general soil map units. This map is useful in planning the use and management of large areas.

To find information about your area of interest, locate that area on the map, identify the name of the map unit in the area on the color-coded map legend, then refer to the section **General Soil Map Units** for a general description of the soils in your area.

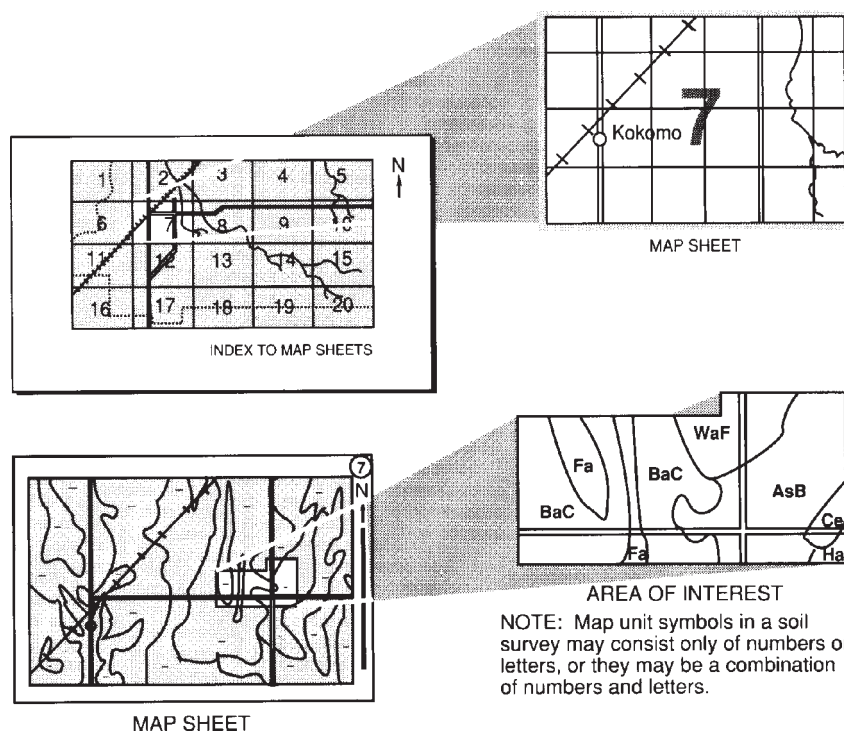
Detailed Soil Maps

The detailed soil maps can be useful in planning the use and management of small areas.

To find information about your area of interest, locate that area on the **Index to Map Sheets**. Note the number of the map sheet and turn to that sheet.

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Turn to the **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described.

The **Contents** shows which table has data on a specific land use for each detailed soil map unit. Also see the **Contents** for sections of this publication that may address your specific needs.



National Cooperative Soil Survey

This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (formerly the Soil Conservation Service) has leadership for the Federal part of the National Cooperative Soil Survey. This survey was made cooperatively by the Natural Resources Conservation Service; the Forest Service; the Michigan Department of Agriculture; the Michigan Agricultural Experiment Station; Michigan State University, Cooperative Extension Service; and Michigan Technological University. The survey is part of the technical assistance furnished to the Gogebic County Soil and Water Conservation District.

Major fieldwork for this soil survey was completed in 2006. Soil names and descriptions were approved in 2006. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 2006. The most current official data are available on the Internet (<http://soils.usda.gov>).

Soil maps in this survey may be copied without permission. Enlargement of these maps, however, could cause misunderstanding of the detail of mapping. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale.

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Cover Photo Caption

Gorge Falls is one of several scenic waterfalls on the Black River near Bessemer.

Additional information about the Nation's natural resources is available online from the Natural Resources Conservation Service at <http://www.nrcs.usda.gov>.

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Issued 2010

Foreword

Soil surveys contain information that affects land use planning in survey areas. They include predictions of soil behavior for selected land uses. The surveys highlight soil limitations, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

Soil surveys are designed for many different users. Farmers, foresters, and agronomists can use the surveys to evaluate the potential of the soil and the management needed for maximum food and fiber production. Planners, community officials, engineers, developers, builders, and home buyers can use the surveys to plan land use, select sites for construction, and identify special practices needed to ensure proper performance. Conservationists, teachers, students, and specialists in recreation, wildlife management, waste disposal, and pollution control can use the surveys to help them understand, protect, and enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. The information in this report is intended to identify soil properties that are used in making various land use or land treatment decisions. Statements made in this report are intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://soils.usda.gov/sqi/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://soils.usda.gov/contact/state_offices/).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

These and many other soil properties that affect land use are described in this soil survey. Broad areas of soils are shown on the general soil map. The location of each map unit is shown on the detailed soil maps. Each soil in the survey area is described, and information on specific uses is given. Help in using this publication and additional information are available at the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

Garry Lee
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Soil Survey of Gogebic County, Michigan

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GOGEBIC COUNTY is in the western part of the Upper Peninsula of Michigan (fig. 1). The county is bordered by Ontonagon County, Iron County, and Wisconsin. It has a total area of 732,256 acres, or about 1,142 square miles. In 2000, the population of the county was 17,370. The city of Bessemer is the county seat.

About 90 percent of the county is forested. Only about one-half percent is classified as farmland. Retail trades and the service industry are the major employers.

About 91 different types of soils are in Gogebic County. The soils vary widely in texture, natural drainage, slope, and other characteristics. Because of steep slopes, droughtiness, and rockiness, many of these soils are best suited to use as forestland. The subsoil in most of the moderately well drained soils has a restrictive layer that limits the use of forestry equipment and also inhibits residential development. About 21 percent of the county is poorly drained mineral soils and very poorly drained organic soils.

General Nature of the Survey Area

This section provides general information about the survey area. It describes climate, physiography, geology, lakes and streams, industry and transportation facilities, and history and development.

Climate

Table 1 gives data on temperature and precipitation for the survey area as recorded at Ironwood in the period 1971 to 2000. Table 2 shows probable dates of the first freeze in fall and the last freeze in spring. Table 3 provides data on the length of the growing season.

Soil Survey of Gogebic County, Michigan



Figure 1.—Location of Gogebic County in Michigan.

In winter, the average temperature is 13.4 degrees F and the average daily minimum temperature is 3.6 degrees. The lowest temperature during the period of record, which occurred at Ironwood on January 17, 1982, is -41 degrees. In summer, the average temperature is 63.3 degrees and the average daily maximum temperature is 74.6 degrees. The highest temperature, which occurred at Ironwood on July 13, 1936, is 104 degrees.

Growing degree days are shown in table 1. They are equivalent to “heat units.” During the month, growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (40 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall.

The average annual total precipitation is 34.58 inches. Of this total, about 15.68 inches, or 45 percent, usually falls in June through September. The growing season for most crops falls within this period. The heaviest 1-day rainfall on record was 6.72 inches at Ironwood on July 21, 1909. Thunderstorms occur on about 30 days each year, and most occur in July.

The average seasonal snowfall is 180.2 inches. The greatest snow depth at any one time was 95 inches recorded on December 28, 1938. On an average, 147 days per year have at least 1 inch of snow on the ground. The heaviest 1-day snowfall on record was 24 inches recorded on December 16, 1920.

The average relative humidity in midafternoon is about 65 percent. Humidity is higher at night, and the average at dawn is about 76 percent. The sun shines 65 percent of the time possible in summer and 38 percent in winter. The prevailing wind is from the west. Average windspeed is highest, 9.1 miles per hour, in December.

Physiography

The topography in the survey area ranges from steep rocky ridges and dissected glacial deposits to gently sloping lake plains and gently rolling to nearly level outwash channels. Elevation ranges from about 602 feet at the Lake Superior shoreline to 1,800 feet above sea level. The bedrock geology and glacial activity have played key roles in shaping the region.

Following are descriptions of the major types of landforms in Gogebic County (see Landform Map).

Bedrock-Controlled Ground Moraine

This landform consists of thin till deposits overlying bedrock. In some areas a predominance of sandy drift overlies the bedrock. Rock outcrops are common (fig. 2). Deeper soils occur where the underlying bedrock is steep and irregular. In some places there is an abundance of small outwash-filled channels associated with this landform. The underlying bedrock is predominantly igneous and metamorphic rock, but smaller areas of sedimentary and conglomerate bedrock are included. The Gogebic Iron Range occurs within this landform. Major soils include Gogebic, Peshekee, Michigamme, Cathro, and Gay soils.

Disintegration Moraine

This landform consists of drift topography characterized by chaotic mounds and pits, generally randomly oriented, that developed in supraglacial drift by collapse and flow as the underlying stagnant ice melted. Slopes can be steep and unstable, and there are used and unused stream courses and lake depressions interspersed with morainic ridges. Consequently, rapid or abrupt changes occur between materials of



Figure 2.—A prominent rock outcrop in an area of the Bedrock-Controlled Ground Moraine landform.

differing lithology. The landscape is typically pitted with numerous depressions. These depressions are small areas of organic soils, are lakes, or are dry. Major soils include Cathro, Karlin, Keweenaw, Pence, Tula, and Amasa soils and Gogebic soils that have a sandy substratum.

Drumlinized Ground Moraine

This landform occurs as a till plain characterized by numerous elongated oval hills of compact, loamy glacial till, which are generally oriented in a northeast-southwest direction. The drumlins are products of streamline (laminar) flow of the glacier, which molded the subglacial floor through a combination of erosion and deposition. Areas of sandy and gravelly outwash soils in the form of eskers or channels of outwash, along with large areas of organic soils, occur between the drumlins. The dominantly loamy soils of this landform are characterized by an acid to neutral solum 20 to 40 inches thick over dense, neutral loamy till. Major soils include Argonne, Net, Cathro, Pence, Lode, Chabeneau, and Monico soils.

End Moraine

This landform occurs as a system of ice-contact ridges that form the outer margins of the Marenisco and Winegar Moraines. It developed in deposits left at the front of an advancing ice sheet. Ice lobes, such as the Keweenaw Bay, Langlade, and Green Bay, periodically retreated and advanced, leaving a series of ridges. The soils formed predominantly in loamy till, but areas of sandy and gravelly soils occur as a result of the extensive reworking of till that was pushed ahead and deposited by the ice. Major soils include Cathro, Karlin, Amasa, and Gay soils and Gogebic soils that have a sandy substratum.

Glacial Drainage Channel

This landform consists of large drainage channels that formed from extensive amounts of meltwater during deglaciation. The landform was likely an outlet of a glacial lake. The large volumes of water that moved through these channels scoured out preexisting material and redeposited sandy and gravelly outwash material. The landform has outwash terraces with Spring Creek flowing through the bottom. In some areas the glacial drainage channels contain alluvial sediments that formed during periods of more slowly moving water. Major soils include Gogebic, Amasa, Moquah, Arnheim, and Cathro soils.

Ground Moraine

This landform is an extensive, fairly even layer of till that has an uneven or undulating surface. It is a deposit of rock and mineral debris dragged along, in, on, or beneath a glacier and emplaced by such processes as basal lodgment and released from downwasting stagnant ice by ablation. In some areas the ground moraine consists of large, relatively flat till plains, and in other areas the landscape is quite hilly. This landform occurs throughout the entire Upper Peninsula. Major soils include Gogebic, Cathro, Wakefield, and Gay soils.

Lake Terrace

This landform is a steplike surface that is bordered by Lake Superior. It represents the recessional positions of the lake prior to the current lake elevation. It is strongly dissected with numerous intermittent and perennial streams. Rock outcrops occur in some of the drainageways. The soils in areas of this landform formed predominantly in lake-modified till deposits. Major soils include Flintsteel, Rockland, Loggerhead, and Arnheim soils.

Outwash Plain

This landform occurs as an extensive plain consisting of sandy glaciofluvial material. It formed from vast quantities of glacial meltwater overloaded with soil and rock debris. The outwash deposits consist primarily of sand and gravel in well stratified layers. Major soils include Pence, Karlin, Argonne, Vilas, and Dawson soils.

Pitted Outwash Plain

This landform is an outwash plain marked by many irregular depressions, such as kettles and shallow pits, formed by melting of large ice blocks incorporated in the sandy outwash. It contains numerous kettle lakes. Major soils include Keweenaw, Amasa, Cathro, Karlin, and Kalkaska soils.

River Valleys and Terraces

This landform occurs primarily along the South Branch of the Paint River, the Tamarack River, and the Middle Branch of the Ontonagon River. The fast-flowing glacial meltwaters scoured periglacial valleys. Sand and gravel filled the valleys as the discharge slowed and created a river valley and series of terraces. Major soils include Pence, Vilas, and Tawas soils.

Till-Floored Lake Plain

This landform formed when sand, silt, and till deposits were reworked by glacial meltwaters. Most of the landform was covered by glacial lakes and was later exposed when the water level lowered. Wave action of the glacial lake waters along with other glaciofluvial processes resulted in the mixing and reworking of existing glacial drift deposits. The result was a landform on which the soils are extremely variable within short distances. Some areas are dominantly fine textured soils, and others are coarse textured deposits. Major soils include Amnicon, Cuttre, Bergland, and Froberg soils.

Geology

Bedrock geology in the survey area consists of several major stratigraphic units. These are described in the following paragraphs.

The Oronto Group includes the following formations: The Freda Sandstone Formation, which consists of red, brown, and tan sandstone and is exposed offshore in the Little Girl Point area; the Nonesuch Formation, which is composed of siltstone, shale, and sandstone (mostly gray to black) and is exposed at the mouth of the Presque Isle River; and the Copper Harbor Conglomerate Formation, which consists of red to brown conglomerate, sandstone, and siltstone and is exposed at Conglomerate Falls on the Black River.

The Bergland Group includes the following formations: The Porcupine Volcanics, which are composed of massive purplish rhyolite, gray and grayish red andesite, and basalt and are exposed at Copper Peak, and the Portage Lake Volcanics, which consist of dark gray and gray green basalts.

The Powder Mill Group includes the following formations: The Kallander Creek Volcanics, which are predominantly purple and brown andesite and rhyolite, and the Siemens Creek Volcanics, which are olive gray to dark greenish gray basalts. These volcanics are on the bluffs north of U.S. Highway 2 between Ironwood and Wakefield.

The Baraga Group consists of the Tyler Formation, which is a quartz-rich graywacke and argillite (gray, greenish gray, and brown).

The Menominee Group includes the following formations; The Ironwood Iron Formation, which is a strongly ferruginous unit of interbedded white, red, and gray chert and hematite and magnetite, and the Palms Formation, which is composed of gray, gray green, and reddish brown argillite, siltstone, quartzite, and conglomerate.

The southwestern part of the county consists of Puritan Quartz Monzonite, which is medium to coarse grained, pink granitic rock exposed in Erwin Township and southern Bessemer Township.

The area around Gogebic Lake is underlain by Jacobsville Sandstone, which is composed of sandstone, shale, and conglomerate (mostly red and brown).

The southeastern part of the county is underlain by the Michigamme Formation, which consists of thick and stratigraphically varied units of sedimentary and lesser volcanic rocks with intrusions of undivided crystalline rocks (Archean) with complex lithologies of granites, gneiss, and amphibolite.

Lakes and Streams

Gogebic County has 1,153 inland lakes with a surface area of about 21,760 acres. Some of the larger lakes are Gogebic Lake, Cisco Chain of Lakes, and Lac Vieux Desert. The county also has more than 30 miles of Lake Superior shoreline. There are over 1,200 miles of rivers and streams and more than 32 waterfalls. The major rivers in the county are the Montreal River, the Black River, the Presque Isle River, the Cisco Branch of the Ontonagon River, and the Middle Branch of the Ontonagon River. These rivers are all within the Lake Superior watershed. The many tributary streams and the smaller rivers and creeks offer some of the best trout fishing in the area.

Industry and Transportation Facilities

Light manufacturing, retail trade, and the service industry are the major employers in Gogebic County. The major manufactured goods include fabrics, plastics, and wood products.

The main roads are U.S. Highways 2 and 45 and Michigan Highways 28 and 64. The county is served by the Wisconsin Central Railroad. Regularly scheduled passenger service is available at the Iron-Gogebic County Airport.

History and Development

Gogebic County got its name from the Chippewa Indian word *a-go-je-bic*, meaning “rocky shore” or “rocky dividing lake.” The Flambeau Tribe of Chippewa frequented this area prior to European settlement. Early surveyors reported finding gardens of potatoes and other crops. Additionally, Native Americans produced maple syrup and fished, hunted, and gathered. An Indian trail ran between the northern extents of summer grounds at the mouth of the Montreal River to winter grounds at Flambeau. A portion of this Old Flambeau Trail is in the westernmost part of the survey area.

The area that includes Gogebic County was once part of New France. Among the first Europeans to explore this area was Étienne Brulé. Beginning in 1618, he and his retinue of French voyageurs and fur traders canoed the southern shore of the great unsalted sea, Lake Superior.

Catholic missionaries, particularly the Jesuits, also left their mark. In 1660, Père René Menard traveled by trail from Keweenaw Point to Lac Vieux Desert in the Watersmeet area. The Jesuit missionaries, Frs. Jacques Marquette and Claude Allouez, traveled to the mouth of the Montreal River in 1669. Subsequent European exploration led to the establishment of Hudson Bay’s Trading Post at the mouth of the Presque Isle River in 1763. The American Fur Trading Company established posts at the mouth of the Montreal River and at Lac du Flambeau in 1833.

The area remained under French jurisdiction until 1783, when the British assumed control. British rule ended when the area became part of the American territories. As

a result of the Border War of 1840, the entire Upper Peninsula became a part of Michigan. In exchange, a strip of land containing Toledo (at the southeasternmost part of the Lower Peninsula) became part of Ohio. It wasn't until 1923 that the United States Supreme Court determined that the western border shared with Wisconsin was to be the main branch of the Montreal River. Initially, all of the western Upper Peninsula was Ontonagon County; however, because the county seat in the city of Ontonagon was too far from the iron belt, Gogebic County was established in 1887.

Mining provided the primary catalyst for European settlement in Gogebic County. There is little recorded history from before Michigan became a State. In an 1848 report by Dr. A. Randall, a geologist, the presence of iron ore bodies was noted. Interest was then generated in the Great Gogebic Range. These forested, rock-ribbed hills ran from Lake Gogebic to the Bad River in Wisconsin. Exploration for iron ore began in 1879. The following year, Richard Langford discovered ore at what would become the Colby mine near Bessemer.

Supplies and equipment were difficult to transport. They were brought in on the Presque Isle, Black, and Montreal Rivers. From those points, items were packed in. The arrival of the Chicago and Northwestern Railroads in Watersmeet in 1883 and in Bessemer the following year greatly facilitated deliveries. In 1884, the first shipment of iron ore was sent out from the Gogebic Range. The Range was soon a major source of iron ore. It became vitally important to the Nation's economic and military strength. Over the next 75 years, the numerous mines produced about 330 million tons of iron ore. This production, however, came at great personal cost. More than 750 fatalities can be attributed to mining in Gogebic County. As cheaper ore became available overseas, local mines started to close. The last mine to close was the Peterson Mine in 1966.

The second major interest has been timber. The first sawmill opened in 1866 in Irontown (Ramsey). A second one followed in 1867 in Marenisco. Large volumes of local timber were used in the mines as bracing material. Additionally, charcoal was produced from hardwoods and used in the smelters. For early construction, white pine was the preferred species. Although white pine did exist in Gogebic County, much of the county supported mature stands of hemlock, sugar maple, and yellow birch. Early lumber companies paid \$50 per 40 acres. They harvested as much as 250,000 board feet of lumber per 40 acres.

The soils of Gogebic County are relatively moist and fertile. Consequently, forest fires have not been as prevalent or severe as they are in areas of the drier, sandier soils elsewhere in the lake states. Today, forested lands in Gogebic County are managed for perpetual and multiple use by individuals, private companies, the Gogebic County Forest, the State of Michigan, and the United States Forest Service (fig. 3).

Early agricultural development in Gogebic County was enhanced by the booming mining communities. Many fields were painstakingly cleared of trees and field rock that exists almost universally across the Gogebic Range. Many "rock piles" (fig. 4) stand today in testament to the hard work of the pioneers, who were typically farmers, loggers, or miners. Dairying became the primary agricultural activity. Crops of potatoes, hay, corn, sunflowers, oats, peas, rutabaga, and barley also were grown. Today, dairying and cash cropping have all but disappeared from Gogebic County. Specialty farms, hobby farms, residential development, and tree plantations have replaced most of the early farms. Other fields are overgrown and have reverted to forestland.

The population of Gogebic County peaked in 1927 with 33,225 persons. The closing of the mines in the mid 1900s was followed by a decrease in the number of people. The 2005 census counted 16,861 residents in the county. The population of Ironwood was 5,728; that of Wakefield was 1,956; and that of Bessemer was 1,957.



Figure 3.—Harvesting of wood products is an important economic activity in Gogebic County.

In recent times, recreation has become a prominent land use in Gogebic County, attracting many thousands of visitors yearly. The cold temperatures and average annual snowfall of more than 150 inches at first discouraged interest in the area. Now “Big Snow Country” draws many winter sports enthusiasts. Gogebic County has four downhill ski hills, numerous cross-country ski trails, over 175 miles of State-managed snowmobile trails, and the only ski flying hill in North America. Other recreational uses include fishing, hunting, mountain biking, camping, wildlife watching, and sightseeing. Gogebic Community College, which was established in 1932, offers a wide variety of educational programs, including a nationally recognized Ski Area Management program.

How This Survey Was Made

This survey was made to provide updated information about the soils and miscellaneous areas in the survey area, which is in Major Land Resource Areas 90A, 92, 93B, and 94D. Major land resource areas (MLRAs) are geographically associated land resource units that share a common land use, elevation and topography, climate, water, soils, and vegetation (USDA/NRCS, 2006). Gogebic County is a subset of MLRAs 90A, 92, 93B, and 94D. Map unit design is based on documentation of the occurrence of soils throughout the MLRAs. In some places in this survey, a soil may be referred to that was not mapped in Gogebic County but that does occur with the MLRA.

The information in this survey includes a description of the soils and miscellaneous areas and their location and a discussion of their properties and the subsequent effects on suitability, limitations, and management for specified uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of

drainage; the kinds of crops and native plants; and the kinds of bedrock. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

The soils and miscellaneous areas in the survey area are in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind or segment of the landscape. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landscape, soil scientists develop a concept, or model, of how the soils were formed. Thus, during mapping, this model enables the soil scientists to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Individual soils on the landscape commonly merge into one another as their characteristics gradually change. To construct an accurate map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they observed. The maximum depth of observation was about 80 inches (6.7 feet). The soil scientists noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, soil reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for



Figure 4.—The high content of stones and cobbles in the major soils of Gogebic County has resulted in numerous large stone piles in agricultural areas.

comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Interpretations are modified as necessary to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a seasonal high water table within certain depths in most years, but they cannot predict that the water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

The descriptions, names, and delineations of the soils in this survey area may not fully agree with those of the soils in adjacent survey areas. Differences are the result of an improved knowledge of soils, modifications in series concepts, or variations in the intensity of mapping or in the extent of the soils in the survey areas.

Survey Procedures

The general procedures followed in making this survey are described in the "National Soil Survey Handbook" of the Natural Resources Conservation Service (USDA/NRCS). Before the actual fieldwork was begun, preliminary boundaries of slopes and landforms were plotted stereoscopically on aerial photographs. USGS topographic maps were used to help relate land and image features.

A reconnaissance was made by pickup truck before the surface was traversed on foot. In areas where the soil pattern is very complex, traverses and random observations were spaced as closely as 200 yards. In areas where the soil pattern is relatively simple, traverses were about one-fourth mile apart.

As the traverses were made, the landscape was divided into segments. For example, a hillside was separated from a swale and a gently sloping ridgetop from a very steep side slope.

Observations of such items as landforms, vegetation, and roadcuts were made without regard to spacing. Soil boundaries were determined on the basis of examinations, observations of the landscape and vegetation, and photo interpretation. The soil material was examined with the aid of a hand auger, spade, or shovel to a depth of about 80 inches.

Soil Survey of Gogebic County, Michigan

Samples for chemical and physical analyses were taken from the sites of some pedons for some of the major soils in the survey area. The analyses were made by the National Soil Survey Laboratory in Lincoln, Nebraska. The results of the analyses are stored in a computerized data file at the laboratory. The results of the analyses and descriptions of the laboratory procedures can be obtained online at <http://ssldata.nrcs.usda.gov/>.

General Soil Map Units

The general soil map in this publication shows broad areas that have a distinctive pattern of soils, relief, and drainage. These broad areas are called associations. Each association on the general soil map is a unique natural landscape. Typically, it consists of one or more major soils or miscellaneous areas and some minor soils or miscellaneous areas. It is named for the major soils or miscellaneous areas. The components of one association can occur in another but in a different pattern.

The general soil map can be used to compare the suitability of large areas for general land uses. Areas of suitable soils can be identified on the map. Likewise, areas where the soils are not suitable can be identified.

Because of its small scale, the map is not suitable for planning the management of a farm or field or for selecting a site for a road or building or other structure. The soils in any one association differ from place to place in slope, depth, drainage, and other characteristics that affect management.

1. Amnicon-Cuttre-Bergland Association

This association consists of nearly level to steep, moderately well drained to poorly drained soils on till-floored lake plains and lake plains. These soils formed in clayey materials. They have moderate natural fertility and a high water-holding capacity and are slightly susceptible to ground-water contamination.

Setting

Landform: Till-floored lake plains and lake plains

Slope range: 0 to 35 percent

Composition

Extent of the association in the survey area: Less than 1 percent

Extent of the soils in the association:

Amnicon—35 percent

Cuttre—24 percent

Bergland—14 percent

Soils of minor extent—27 percent

Soil Properties and Qualities

Amnicon

Drainage class: Moderately well drained

Parent material: Clayey material

Texture of the surface layer: Silt loam

Slope: 0 to 35 percent

Cuttre

Drainage class: Somewhat poorly drained

Parent material: Clayey material

Texture of the surface layer: Silt loam

Slope: 0 to 3 percent

Bergland

Drainage class: Poorly drained

Parent material: Clayey material

Texture of the surface layer: Mucky clay

Slope: 0 to 2 percent

Soils of Minor Extent

- The moderately well drained Froberg soils on low rises and on shoulders
- The poorly drained Schaaf Creek soils on flood plains and in drainageways
- The poorly drained Matchwood soils in drainageways and depressions

Use and Management

Major use: Forestland

Management concerns: Equipment limitations, windthrow hazard, plant competition

Other uses: Cropland, pasture, building site development

Management concerns affecting cropland: Wetness, compaction

Management concerns affecting pasture: Wetness

Management concerns affecting building site development: Wetness

Management concerns affecting septic tank absorption fields: Restricted permeability, wetness

2. Argonne-Net-Cathro Association

This association consists of nearly level to steep, moderately well drained to very poorly drained soils on drumlins and moraines. These soils formed in loamy, sandy, and organic materials. They have moderate natural fertility and a moderate to high water-holding capacity and are moderately or highly susceptible to ground-water contamination.

Setting

Landform: Drumlins and moraines

Slope range: 0 to 35 percent

Composition

Extent of the association in the survey area: 3 percent

Extent of the soils in the association:

Argonne—63 percent

Net—8 percent

Cathro—6 percent

Soils of minor extent—23 percent

Soil Properties and Qualities

Argonne

Drainage class: Moderately well drained

Parent material: Loamy material

Texture of the surface layer: Fine sandy loam

Slope: 0 to 35 percent

Net

Drainage class: Somewhat poorly drained

Parent material: Loamy material over gravelly sand

Texture of the surface layer: Loam

Slope: 0 to 4 percent

Cathro

Drainage class: Very poorly drained

Parent material: Organic material over loamy material

Texture of the surface layer: Muck

Slope: 0 to 1 percent

Soils of Minor Extent

- The well drained Lode soils in glacial drainageways
- The somewhat excessively drained Pence soils on eskers, outwash terraces, and kames
- The very poorly drained Loxley soils in depressions

Use and Management

Major uses: Forestland, wildlife habitat

Management concerns: Equipment limitations, seedling mortality, windthrow hazard

Other uses: Building site development

Management concerns affecting building site development: Wetness, slope

Management concerns affecting septic tank absorption fields: Restricted permeability, wetness, slope

3. Flintsteel-Rockland-Loggerhead Association

This association consists of nearly level to very steep, moderately well drained and well drained soils on ground moraines and in rotational landslide areas. These soils formed in loamy materials. They have moderate natural fertility and a moderate water-holding capacity and are moderately susceptible to ground-water contamination.

Setting

Landform: Ground moraines and rotational landslide areas

Slope range: 1 to 70 percent

Composition

Extent of the association in the survey area: 5 percent

Extent of the soils in the association:

Flintsteel—51 percent

Rockland—14 percent

Loggerhead—10 percent

Soils of minor extent—25 percent

Soil Properties and Qualities

Flintsteel

Drainage class: Moderately well drained

Parent material: Loamy material

Texture of the surface layer: Fine sandy loam

Slope: 1 to 35 percent

Rockland

Drainage class: Well drained

Parent material: Loamy material

Texture of the surface layer: Fine sandy loam

Slope: 18 to 70 percent

Loggerhead

Drainage class: Moderately well drained

Parent material: Loamy material

Texture of the surface layer: Loam

Slope: 1 to 35 percent

Soils of Minor Extent

- The well drained Alcona soils, which formed in stratified loamy and sandy glaciolacustrine deposits
- The well drained Amasa soils, which formed in loamy over sandy material; on terraces, kames, and eskers
- The poorly drained Arnheim soils in drainageways

Use and Management

Major use: Forestland

Management concerns: Equipment limitations, seedling mortality

Other uses: Cropland, pasture, building site development

Management concerns affecting cropland: Wetness, compaction

Management concerns affecting pasture: Wetness

Management concerns affecting building site development: Slope, wetness

Management concerns affecting septic tank absorption fields: Restricted permeability, slope

4. Gogebic, sandy substratum-Cathro-Gay Association

This association consists of nearly level to steep, moderately well drained, poorly drained, and very poorly drained soils on end moraines. These soils formed in loamy and organic materials. They have moderate natural fertility and a moderate to high water-holding capacity and are moderately to highly susceptible to ground-water contamination.

Setting

Landform: End moraines

Slope range: 0 to 35 percent

Composition

Extent of the association in the survey area: 4 percent

Extent of the soils in the association:

Gogebic, sandy substratum—54 percent

Cathro—17 percent

Gay—16 percent

Soils of minor extent—13 percent

Soil Properties and Qualities

Gogebic, sandy substratum

Drainage class: Moderately well drained

Parent material: Loamy over sandy material

Texture of the surface layer: Sandy loam

Slope: 1 to 35 percent

Cathro

Drainage class: Very poorly drained

Parent material: Organic material over loamy material

Texture of the surface layer: Muck

Slope: 0 to 1 percent

Gay

Drainage class: Poorly drained or very poorly drained

Parent material: Loamy material

Texture of the surface layer: Muck and loam

Slope: 0 to 2 percent

Soils of Minor Extent

- The well drained Amasa soils, which formed in loamy over sandy material; on terraces, kames, and eskers
- The somewhat poorly drained Tula soils in intermediate landscape positions
- The somewhat excessively drained Karlin soils in the uplands

Use and Management

Major use: Forestland

Management concerns: Equipment limitations, erosion, seedling mortality

Other uses: Building site development

Management concerns affecting building site development: Wetness, slope

Management concerns affecting septic tank absorption fields: Restricted permeability, wetness, slope

5. Gogebic, sandy substratum-Cathro-Karlin Association

This association consists of nearly level to very steep, somewhat excessively drained to very poorly drained soils on disintegration moraines (fig. 5). These soils formed in loamy, sandy, and organic materials. They have moderate to low natural fertility and a high to low water-holding capacity and are moderately to highly susceptible to ground-water contamination.

Setting

Landform: Disintegration moraines

Slope range: 0 to 75 percent

Composition

Extent of the association in the survey area: 22 percent

Extent of the soils in the association:

Gogebic, sandy substratum—63 percent

Cathro—16 percent

Karlin—10 percent

Soils of minor extent—11 percent

Soil Properties and Qualities

Gogebic, sandy substratum

Drainage class: Moderately well drained

Parent material: Loamy over sandy material

Texture of the surface layer: Sandy loam

Slope: 1 to 35 percent

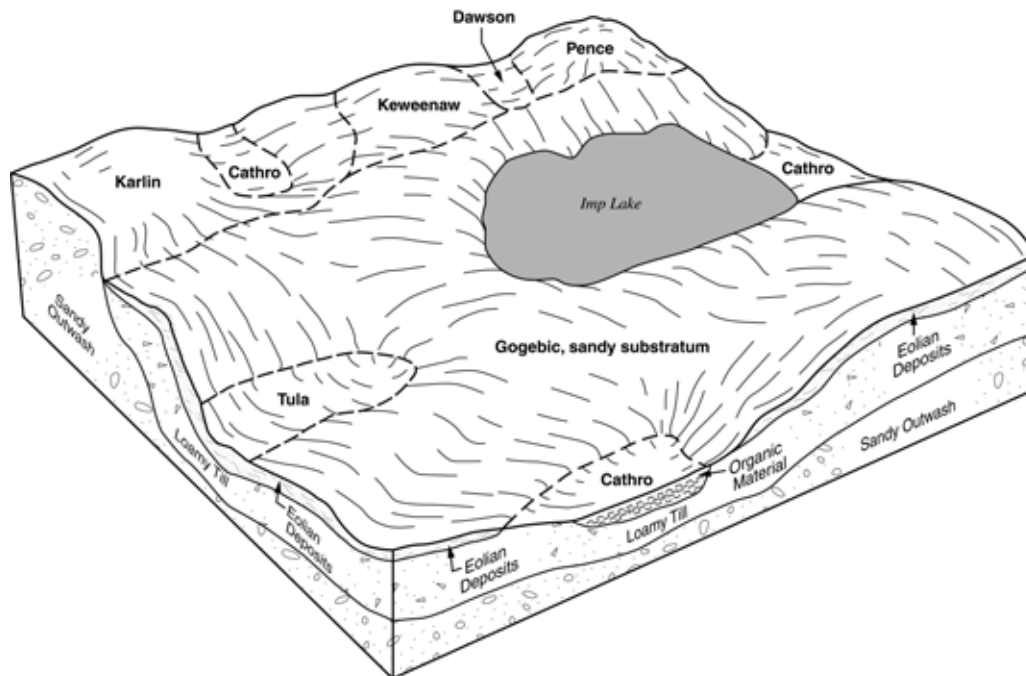


Figure 5.—Typical pattern of soils and underlying material in the Gogebic, sandy substratum-Cathro-Karlin association.

Cathro

Drainage class: Very poorly drained

Parent material: Organic material over loamy material

Texture of the surface layer: Muck

Slope: 0 to 1 percent

Karlin

Drainage class: Somewhat excessively drained

Parent material: Sandy material

Texture of the surface layer: Fine sandy loam

Slope: 0 to 75 percent

Soils of Minor Extent

- The well drained Keweenaw soils in the uplands
- The somewhat excessively drained Pence soils, which have gravel in the subsoil; in outwash channels
- The somewhat poorly drained Tula soils in the less sloping areas

Use and Management

Major use: Forestland

Management concerns: Equipment limitations, erosion, seedling mortality

Other uses: Building site development

Management concerns affecting building site development: Wetness, slope

Management concerns affecting septic tank absorption fields: Restricted permeability, wetness, slope

6. Gogebic-Amasa-Cathro Association

This association consists of nearly level to very steep, well drained to very poorly drained soils on moraines. These soils formed in loamy, sandy, and organic materials. They have moderate natural fertility and a moderate water-holding capacity and are moderately to highly susceptible to ground-water contamination.

Setting

Landform: Moraines

Slope range: 0 to 70 percent

Composition

Extent of the association in the survey area: 2 percent

Extent of the soils in the association:

Gogebic—42 percent

Amasa—25 percent

Cathro—10 percent

Soils of minor extent—23 percent

Soil Properties and Qualities

Gogebic

Drainage class: Moderately well drained

Parent material: Loamy material

Texture of the surface layer: Sandy loam

Slope: 1 to 35 percent

Amasa

Drainage class: Well drained

Parent material: Loamy material over sandy and gravelly deposits

Texture of the surface layer: Fine sandy loam

Slope: 0 to 70 percent

Cathro

Drainage class: Very poorly drained

Parent material: Organic material over loamy material

Texture of the surface layer: Muck

Slope: 0 to 1 percent

Soils of Minor Extent

- The moderately well drained Moquah and poorly drained Arnheim soils, which formed in alluvium; on flood plains
- The poorly drained, loamy Gay soils in low areas and depressions

Use and Management

Major use: Forestland

Management concerns: Equipment limitations, erosion, seedling mortality

Other uses: Cropland, pasture, building site development

Management concerns affecting cropland: Wetness, slope

Management concerns affecting pasture: Wetness

Management concerns affecting building site development: Slope, wetness

Management concerns affecting septic tank absorption fields: Rapid permeability, restricted permeability, slope

7. Gogebic-Cathro-Gay Association

This association consists of nearly level to steep, moderately well drained to very poorly drained soils on moraines and till plains. These soils formed in loamy and organic materials. They have moderate natural fertility and a moderate to high water-holding capacity and are moderately to highly susceptible to ground-water contamination.

Setting

Landform: Moraines and till plains

Slope range: 0 to 35 percent

Composition

Extent of the association in the survey area: 9 percent

Extent of the soils in the association:

Gogebic—34 percent

Cathro—30 percent

Gay—15 percent

Soils of minor extent—21 percent

Soil Properties and Qualities

Gogebic

Drainage class: Moderately well drained

Parent material: Loamy material

Texture of the surface layer: Sandy loam

Slope: 1 to 35 percent

Cathro

Drainage class: Very poorly drained

Parent material: Organic material over loamy material

Texture of the surface layer: Muck

Slope: 0 to 1 percent

Gay

Drainage class: Poorly drained or very poorly drained

Parent material: Loamy material

Texture of the surface layer: Muck and loam

Slope: 0 to 2 percent

Soils of Minor Extent

- The somewhat excessively drained, sandy Kalkaska soils in the uplands
- The well drained, sandy Keweenaw soils in the uplands
- The very poorly drained, acid Loxley soils

Use and Management

Major use: Forestland

Management concerns: Equipment limitations, seedling mortality, erosion

Other uses: Building site development

Management concerns affecting building site development: Wetness, slope

Management concerns affecting septic tank absorption fields: Wetness, restricted permeability, slope

8. Gogebic-Cathro-Tula Association

This association consists of nearly level to steep, moderately well drained to very poorly drained soils on moraines and till plains. These soils formed in loamy and organic materials. They have moderate natural fertility and a moderate to high water-holding capacity and are moderately to highly susceptible to ground-water contamination.

Setting

Landform: Moraines and till plains

Slope range: 0 to 35 percent

Composition

Extent of the association in the survey area: 3 percent

Extent of the soils in the association:

Gogebic—42 percent

Cathro—21 percent

Tula—14 percent

Soils of minor extent—23 percent

Soil Properties and Qualities

Gogebic

Drainage class: Moderately well drained

Parent material: Loamy material

Texture of the surface layer: Silt loam

Slope: 1 to 35 percent

Cathro

Drainage class: Very poorly drained

Parent material: Organic material over loamy material

Texture of the surface layer: Muck

Slope: 0 to 1 percent

Tula

Drainage class: Somewhat poorly drained

Parent material: Loamy material

Texture of the surface layer: Silt loam

Slope: 0 to 4 percent

Soils of Minor Extent

- The poorly drained, loamy Gay soils in depressions and drainageways
- The poorly drained Pleine soils, which formed in mucky over loamy material; in depressions and drainageways
- The poorly drained, loamy Arnheim soils in drainageways

Use and Management

Major use: Forestland

Management concerns: Equipment limitations, seedling mortality, windthrow hazard

Other uses: Building site development

Management concerns affecting building site development: Wetness

Management concerns affecting septic tank absorption fields: Wetness, restricted permeability

9. Gogebic-Gay-Cathro Association

This association consists of nearly level to steep, moderately well drained to very poorly drained soils on moraines and till plains (fig. 6). These soils formed in loamy and organic materials. They have moderate natural fertility and a moderate to high water-holding capacity and are moderately to highly susceptible to ground-water contamination.

Setting

Landform: Moraines and till plains

Slope range: 0 to 35 percent

Composition

Extent of the association in the survey area: 18 percent

Extent of the soils in the association:

Gogebic—48 percent

Gay—21 percent

Cathro—16 percent

Soils of minor extent—15 percent

Soil Properties and Qualities

Gogebic

Drainage class: Moderately well drained

Parent material: Loamy material

Texture of the surface layer: Sandy loam

Slope: 1 to 35 percent

Gay

Drainage class: Poorly drained or very poorly drained

Parent material: Loamy material

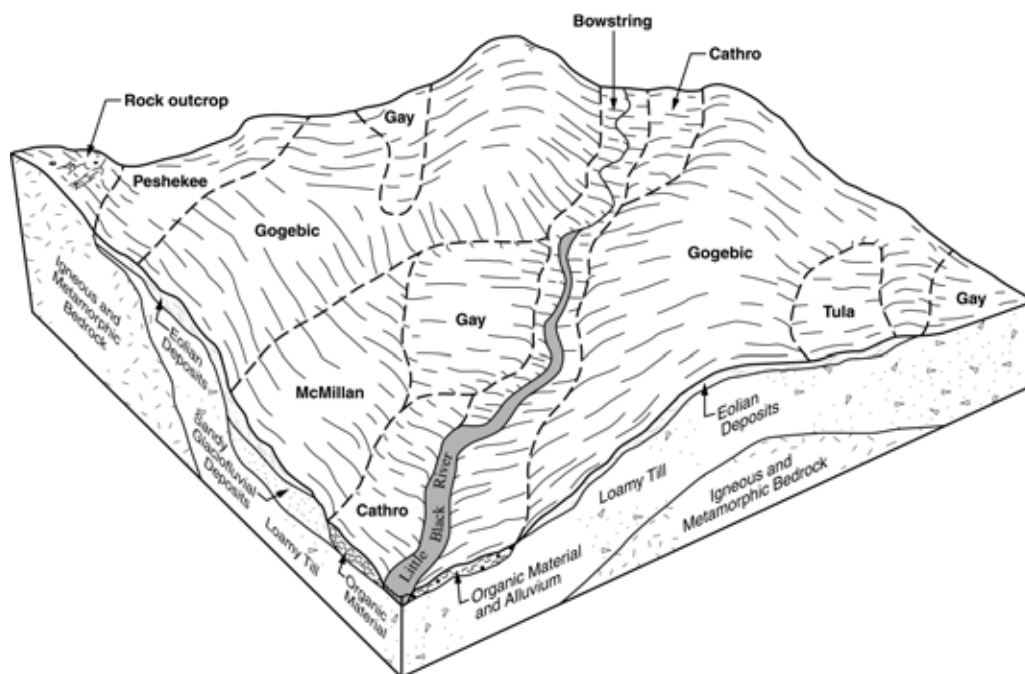


Figure 6.—Typical pattern of soils and underlying material in the Gogebic-Gay-Cathro association.

Texture of the surface layer: Muck and loam

Slope: 0 to 2 percent

Cathro

Drainage class: Very poorly drained

Parent material: Organic material over loamy material

Texture of the surface layer: Muck

Slope: 0 to 1 percent

Components of Minor Extent

- The well drained, loamy Peshekee soils, which are shallow to bedrock
- The very poorly drained Bowstring soils, which formed in stratified organic and mineral material; on flood plains and in drainageways
- The well drained McMillan soils, which formed in stratified sandy materials; in the uplands
- Areas of rock outcrop

Use and Management

Major use: Forestland

Management concerns: Equipment limitations, seedling mortality, erosion

Other uses: Cropland, pasture, building site development

Management concerns affecting cropland: Wetness, slope

Management concerns affecting pasture: Wetness

Management concerns affecting building site development: Wetness, slope

Management concerns affecting septic tank absorption fields: Wetness, restricted permeability, slope

10. Gogebic-Michigamme-Flintsteel Association

This association consists of nearly level to very steep, well drained and moderately well drained soils on bedrock-controlled moraines and water-worked till plains. These soils formed in loamy materials. They have moderate natural fertility and a moderate to low water-holding capacity and are moderately susceptible to ground-water contamination.

Setting

Landform: Bedrock-controlled moraines and water-worked till plains

Slope range: 1 to 75 percent

Composition

Extent of the association in the survey area: 2 percent

Extent of the soils in the association:

Gogebic—36 percent

Michigamme—21 percent

Flintsteel—7 percent

Soils of minor extent—36 percent

Soil Properties and Qualities

Gogebic

Drainage class: Moderately well drained

Parent material: Loamy material

Texture of the surface layer: Fine sandy loam

Slope: 1 to 35 percent

Michigamme

Drainage class: Well drained

Parent material: Loamy material underlain by bedrock

Texture of the surface layer: Fine sandy loam

Slope: 8 to 75 percent

Flintsteel

Drainage class: Moderately well drained

Parent material: Loamy material

Texture of the surface layer: Fine sandy loam

Slope: 1 to 35 percent

Components of Minor Extent

- The well drained Rockland soils in rotational landslide areas
- The moderately well drained Fence soils, which formed in stratified loamy material; on terraces
- Areas of rock outcrop

Use and Management

Major uses: Forestland, recreation, wildlife habitat

Management concerns affecting forestland: Equipment limitations, erosion

11. Gogebic-Oldman Association

This association consists of nearly level to steep, moderately well drained soils on bedrock-controlled moraines. These soils formed in loamy material. They have moderate natural fertility and a moderate to low water-holding capacity and are moderately susceptible to ground-water contamination.

Setting

Landform: Bedrock-controlled moraines

Slope range: 1 to 35 percent

Composition

Extent of the association in the survey area: Less than 1 percent

Extent of the soils in the association:

Gogebic—86 percent

Oldman—13 percent

Soils of minor extent—1 percent

Soil Properties and Qualities

Gogebic

Drainage class: Moderately well drained

Parent material: Loamy material

Texture of the surface layer: Fine sandy loam

Slope: 1 to 35 percent

Oldman

Drainage class: Moderately well drained

Parent material: Loamy-skeletal material

Texture of the surface layer: Fine sandy loam

Slope: 1 to 35 percent

Soils of Minor Extent

- The moderately well drained, sandy Manido soils in outwash channels
- The moderately well drained Annalake soils, which formed in stratified loamy material; in outwash channels

Use and Management

Major uses: Forestland, recreation, wildlife habitat

Management concerns affecting forestland: Equipment limitations, slope

12. Gogebic-Cathro-Rock Outcrop Association

This association consists of rock outcrop and nearly level to steep, very poorly drained to moderately well drained soils on bedrock-controlled moraines and till plains (fig. 7). These soils formed in loamy and mucky materials. They have moderate to low natural fertility and a moderate to high water-holding capacity and are moderately to highly susceptible to ground-water contamination.

Setting

Landform: Bedrock-controlled moraines and till plains

Slope range: 0 to 100 percent

Composition

Extent of the association in the survey area: 9 percent

Extent of the soils in the association:

Gogebic—72 percent

Cathro—7 percent

Rock outcrop—3 percent

Soils of minor extent—18 percent

Soil Properties and Qualities

Gogebic

Drainage class: Moderately well drained

Parent material: Loamy material

Texture of the surface layer: Fine sandy loam and silt loam

Slope: 1 to 35 percent

Cathro

Drainage class: Very poorly drained

Parent material: Organic material over loamy material

Texture of the surface layer: Muck

Slope: 0 to 1 percent

Rock outcrop

Slope: 0 to 100 percent

Soils of Minor Extent

- The somewhat poorly drained, loamy Tula soils on low slopes
- The well drained, loamy Michigamme soils, which are moderately deep to bedrock
- The poorly drained, loamy Gay soils in drainageways and depressions

Use and Management

Major uses: Forestland, recreation, wildlife habitat

Management concerns: Equipment limitations, windthrow hazard, slope, seedling mortality

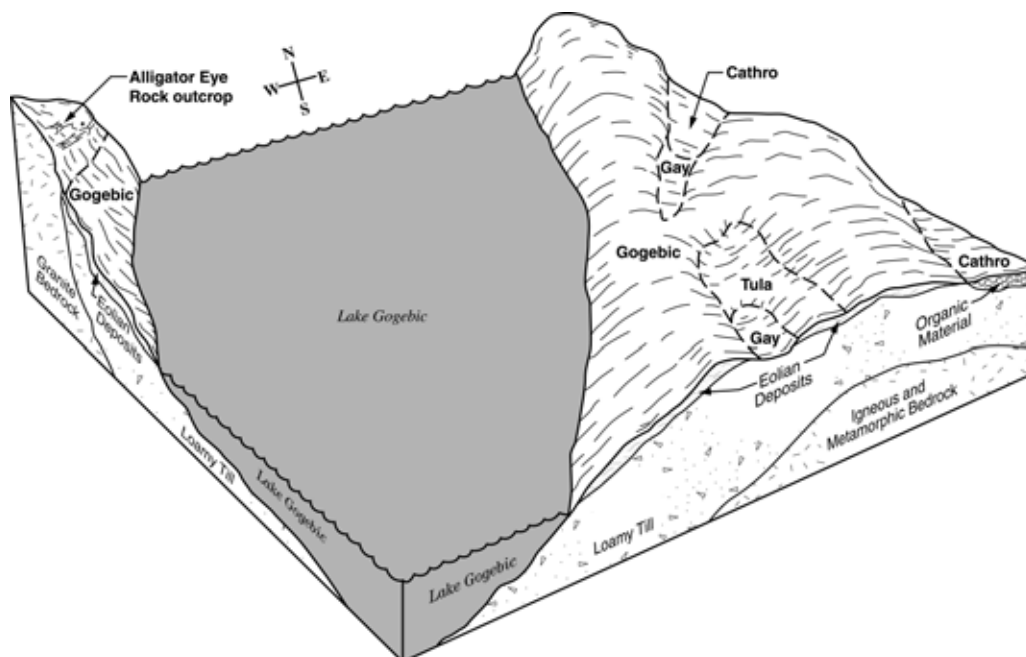


Figure 7.—Typical pattern of soils and underlying material in the Gogebic-Cathro-Rock outcrop and Gogebic-Tula-Cathro associations.

Other uses: Cropland, pasture, building site development

Management concerns affecting cropland: Wetness, bedrock, slope

Management concerns affecting pasture: Wetness

Management concerns affecting building site development: Wetness, bedrock, slope

Management concerns affecting septic tank absorption fields: Wetness, bedrock, restricted permeability, slope

13. Gogebic-Tula-Cathro Association

This association consists of nearly level to steep, moderately well drained to very poorly drained soils on moraines and till plains (fig. 7). These soils formed in loamy and organic materials. They have moderate natural fertility and a moderate to high water-holding capacity and are moderately to highly susceptible to ground-water contamination.

Setting

Landform: Moraines and till plains

Slope range: 0 to 35 percent

Composition

Extent of the association in the survey area: 3 percent

Extent of the soils in the association:

Gogebic—55 percent

Tula—20 percent

Cathro—16 percent

Soils of minor extent—9 percent

Soil Properties and Qualities

Gogebic

Drainage class: Moderately well drained

Parent material: Loamy material
Texture of the surface layer: Fine sandy loam
Slope: 1 to 35 percent

Tula

Drainage class: Somewhat poorly drained
Parent material: Loamy material
Texture of the surface layer: Silt loam
Slope: 0 to 4 percent

Cathro

Drainage class: Very poorly drained
Parent material: Organic material over loamy material
Texture of the surface layer: Muck
Slope: 0 to 1 percent

Soils of Minor Extent

- The poorly drained, loamy Gay soils in depressions and drainageways
- The somewhat poorly drained, loamy Moodig soils in the lower sloping areas
- The very poorly drained Bowstring and poorly drained Arnheim soils in drainageways

Use and Management

Major use: Forestland

Management concerns: Equipment limitations, seedling mortality, windthrow hazard

Other uses: Building site development

Management concerns affecting building site development: Wetness, slope

Management concerns affecting septic tank absorption fields: Wetness, restricted permeability, slope

14. Gogebic-Tula-Rock Outcrop Association

This association consists of rock outcrop and nearly level to steep, somewhat poorly drained to moderately well drained soils on bedrock-controlled moraines and till plains. These soils formed in loamy materials. They have moderate natural fertility and a moderate water-holding capacity and are moderately susceptible to ground-water contamination.

Setting

Landform: Bedrock-controlled moraines and till plains

Slope range: 0 to 100 percent

Composition

Extent of the association in the survey area: Less than 1 percent

Extent of the soils in the association:

Gogebic—82 percent

Tula—8 percent

Rock outcrop—3 percent

Soils of minor extent—7 percent

Soil Properties and Qualities

Gogebic

Drainage class: Moderately well drained

Parent material: Loamy material

Texture of the surface layer: Fine sandy loam

Slope: 1 to 35 percent

Tula

Drainage class: Somewhat poorly drained

Parent material: Loamy material

Texture of the surface layer: Silt loam

Slope: 0 to 4 percent

Rock outcrop

Slope: 0 to 100 percent

Soils of Minor Extent

- The very poorly drained Cathro soils in depressions
- The somewhat poorly drained, loamy Moodig soils
- The poorly drained, loamy Gay soils in drainageways and depressions

Use and Management

Major uses: Forestland, recreation, wildlife habitat

Management concerns: Equipment limitations, windthrow hazard, slope, seedling mortality

15. Gogebic-Wakefield-Cathro Association

This association consists of nearly level to steep, moderately well drained to very poorly drained soils on till plains (fig. 8). These soils formed in loamy and organic materials. They have moderate natural fertility and a moderate to high water-holding capacity and are moderately to highly susceptible to ground-water contamination.

Setting

Landform: Till plains

Slope range: 0 to 35 percent

Composition

Extent of the association in the survey area: 17 percent

Extent of the soils in the association:

Gogebic—44 percent

Wakefield—13 percent

Cathro—12 percent

Soils of minor extent—31 percent

Soil Properties and Qualities

Gogebic

Drainage class: Moderately well drained

Parent material: Loamy material

Texture of the surface layer: Fine sandy loam and silt loam

Slope: 1 to 35 percent

Wakefield

Drainage class: Moderately well drained

Parent material: Loamy material

Texture of the surface layer: Silt loam

Slope: 1 to 35 percent

Cathro

Drainage class: Very poorly drained

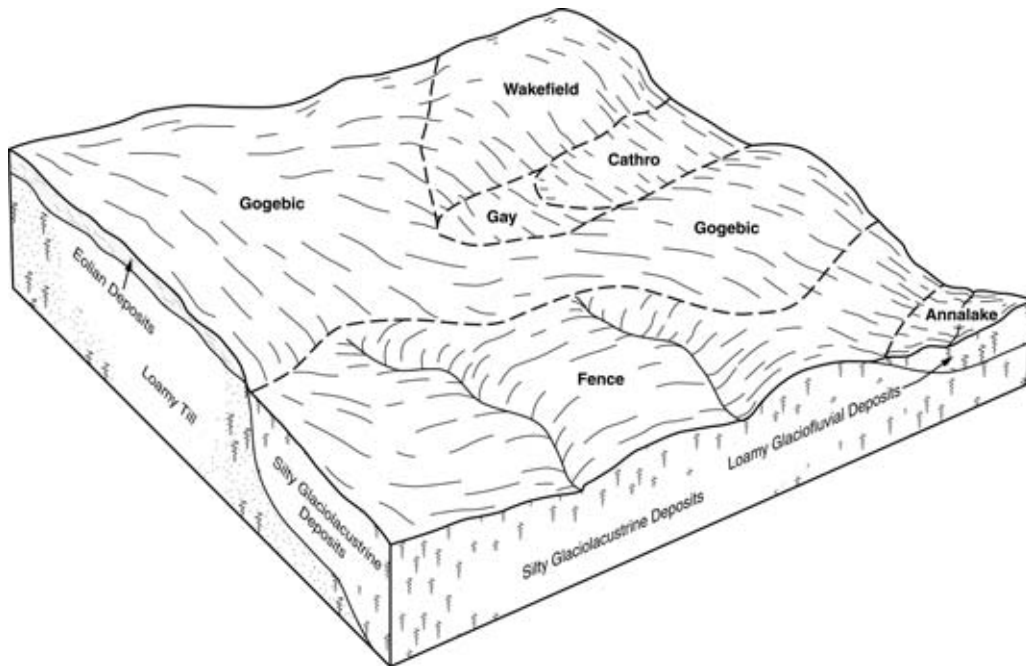


Figure 8.—Typical pattern of soils and underlying material in the Gogebic-Wakefield-Cathro association.

Parent material: Organic material over loamy material

Texture of the surface layer: Muck

Slope: 0 to 1 percent

Soils of Minor Extent

- The moderately well drained Annalake soils, which formed in stratified loamy material; in glacial drainageways
- The poorly drained, loamy Gay soils in depressions and drainageways
- The moderately well drained Fence soils, which formed in stratified silty material; in glacial drainageways

Use and Management

Major use: Forestland

Management concerns: Equipment limitations, seedling mortality, erosion

Other uses: Cropland, pasture, building site development

Management concerns affecting cropland: Wetness, slope

Management concerns affecting pasture: Wetness

Management concerns affecting building site development: Wetness, slope

Management concerns affecting septic tank absorption fields: Wetness, restricted permeability, slope

16. Karlin-Amasa-Cathro Association

This association consists of nearly level to very steep, somewhat excessively drained to very poorly drained soils on pitted outwash plains. These soils formed in loamy, sandy, and organic materials. They have moderate to low natural fertility and a low to high water-holding capacity and are highly susceptible to ground-water contamination.

Setting

Landform: Pitted outwash plains

Slope range: 0 to 75 percent

Composition

Extent of the association in the survey area: Less than 1 percent

Extent of the soils in the association:

Karlin—31 percent

Amasa—22 percent

Cathro—18 percent

Soils of minor extent—29 percent

Soil Properties and Qualities

Karlin

Drainage class: Somewhat excessively drained

Parent material: Sandy material

Texture of the surface layer: Fine sand

Slope: 0 to 75 percent

Amasa

Drainage class: Well drained

Parent material: Loamy material over stratified sand and gravel

Texture of the surface layer: Fine sandy loam

Slope: 0 to 70 percent

Cathro

Drainage class: Very poorly drained

Parent material: Organic material over loamy material

Texture of the surface layer: Muck

Slope: 0 to 1 percent

Soils of Minor Extent

- The very poorly drained Ausable soils, which formed in loamy alluvial material; in drainageways
- The well drained, sandy Keweenaw soils in the uplands
- The somewhat excessively drained, sandy Pence soils on eskers, outwash terraces, and kames

Use and Management

Major use: Forestland

Management concerns: Equipment limitations, seedling mortality, erosion

Other uses: Building site development

Management concerns affecting building site development: Slope

Management concerns affecting septic tank absorption fields: Very rapid permeability, slope

17. Keweenaw-Amasa-Loxley Association

This association consists of nearly level to very steep, well drained to very poorly drained soils in outwash channels. These soils formed in loamy, sandy, and organic materials. They have moderate to low natural fertility and a low to high water-holding capacity and are highly susceptible to ground-water contamination.

Setting

Landform: Outwash channels

Slope range: 0 to 70 percent

Composition

Extent of the association in the survey area: Less than 1 percent

Extent of the soils in the association:

Keweenaw—32 percent

Amasa—15 percent

Loxley—15 percent

Soils of minor extent—38 percent

Soil Properties and Qualities

Keweenaw

Drainage class: Well drained

Parent material: Sandy material

Texture of the surface layer: Fine sand

Slope: 1 to 70 percent

Amasa

Drainage class: Well drained

Parent material: Loamy material over stratified sand and gravel

Texture of the surface layer: Fine sandy loam

Slope: 0 to 70 percent

Loxley

Drainage class: Very poorly drained

Parent material: Acidic peat

Texture of the surface layer: Peat

Slope: 0 to 1 percent

Soils of Minor Extent

- The very poorly drained Cathro soils in depressions and drainageways
- The moderately well drained, loamy Gogebic soils in the uplands
- The somewhat excessively drained, sandy Kalkaska soils in the uplands

Use and Management

Major use: Forestland

Management concerns: Equipment limitations, seedling mortality, erosion

Other uses: Building site development

Management concerns affecting building site development: Slope

Management concerns affecting septic tank absorption fields: Very rapid permeability, slope

18. Pence-Lode-Tawas Association

This association consists of nearly level to steep, somewhat excessively drained to very poorly drained soils on outwash terraces. These soils formed in stratified sandy materials and in organic materials. They have low natural fertility and a low to high water-holding capacity and are highly susceptible to ground-water contamination.

Setting

Landform: Outwash terraces

Slope range: 0 to 35 percent

Composition

Extent of the association in the survey area: Less than 1 percent

Extent of the soils in the association:

Pence—32 percent

Lode—28 percent

Tawas—23 percent

Soils of minor extent—17 percent

Soil Properties and Qualities

Pence

Drainage class: Somewhat excessively drained

Parent material: Stratified sandy material

Texture of the surface layer: Sandy loam

Slope: 0 to 35 percent

Lode

Drainage class: Well drained

Parent material: Loamy material over stratified sand and gravel

Texture of the surface layer: Silt loam

Slope: 0 to 35 percent

Tawas

Drainage class: Very poorly drained

Parent material: Organic material over sandy material

Texture of the surface layer: Muck

Slope: 0 to 2 percent

Soils of Minor Extent

- The moderately well drained, loamy Argonne soils in the uplands
- The very poorly drained, mucky Loxley soils in depressions
- The moderately well drained Manitowish soils, which formed in loamy material over stratified sandy material; in the lower positions on terraces

Use and Management

Major use: Forestland

Management concerns: Equipment limitations, seedling mortality

19. Pence-Vilas-Dawson Association

This association consists of nearly level to steep, excessively drained to very poorly drained soils on outwash plains. These soils formed in stratified sandy materials and in organic materials. They have low natural fertility and a low to high water-holding capacity and are highly susceptible to ground-water contamination.

Setting

Landform: Outwash plains

Slope range: 0 to 35 percent

Composition

Extent of the association in the survey area: 1 percent

Extent of the soils in the association:

Pence—30 percent

Vilas—29 percent

Dawson—13 percent
Soils of minor extent—28 percent

Soil Properties and Qualities

Pence

Drainage class: Somewhat excessively drained
Parent material: Stratified sandy material
Texture of the surface layer: Sandy loam
Slope: 0 to 35 percent

Vilas

Drainage class: Excessively drained
Parent material: Sand
Texture of the surface layer: Loamy sand
Slope: 1 to 18 percent

Dawson

Drainage class: Very poorly drained
Parent material: Acidic peat over sandy material
Texture of the surface layer: Peat
Slope: 0 to 1 percent

Soils of Minor Extent

- The very poorly drained Bowstring soils, which formed in stratified mucky and loamy material; in drainageways
- The somewhat excessively drained, sandy Karlin soils in the uplands
- The moderately well drained Gogebic soils that have a sandy substratum; in the uplands

Use and Management

Major use: Forestland

Management concerns: Equipment limitations, seedling mortality

Other uses: Building site development

Management concerns affecting building site development: Slope

Management concerns affecting septic tank absorption fields: Very rapid permeability, slope

20. Pence-Vilas-Tawas Association

This association consists of nearly level to steep, excessively drained to very poorly drained soils on outwash plains. These soils formed in stratified sandy materials and in organic materials. They have low natural fertility and a low to high water-holding capacity and are highly susceptible to ground-water contamination.

Setting

Landform: Outwash plains

Slope range: 0 to 35 percent

Composition

Extent of the association in the survey area: Less than 1 percent

Extent of the soils in the association:

Pence—30 percent

Vilas—29 percent

Soil Survey of Gogebic County, Michigan

Tawas—13 percent

Soils of minor extent—28 percent

Soil Properties and Qualities

Pence

Drainage class: Somewhat excessively drained

Parent material: Stratified sandy material

Texture of the surface layer: Sandy loam

Slope: 0 to 35 percent

Vilas

Drainage class: Excessively drained

Parent material: Sand

Texture of the surface layer: Loamy sand

Slope: 1 to 18 percent

Tawas

Drainage class: Very poorly drained

Parent material: Organic material over sandy material

Texture of the surface layer: Muck

Slope: 0 to 2 percent

Soils of Minor Extent

- The very poorly drained Bowstring soils, which formed in stratified mucky and loamy materials; in drainageways
- The somewhat excessively drained, sandy Karlin soils in the uplands
- The moderately well drained Gogebic soils that have a sandy substratum; in the uplands

Use and Management

Major use: Forestland

Management concerns: Equipment limitations, seedling mortality

Other uses: Building site development

Management concerns affecting building site development: Slope

Management concerns affecting septic tank absorption fields: Very rapid permeability, slope

Detailed Soil Map Units

The map units delineated on the detailed soil maps in this survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this section, along with the maps, can be used to determine the suitability and potential of a unit for specific uses. They also can be used to plan the management needed for those uses.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives some of the soil features and properties to be considered in planning for specific uses.

Soils that have profiles that are almost alike make up a *soil series*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. The soils of a given series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a

soil phase commonly indicates a feature that affects use or management. For example, Gogebic fine sandy loam, 6 to 18 percent slopes, stony, is a phase of the Gogebic series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Tula-Foxpaw-Gay complex, 0 to 4 percent slopes, stony, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Dawson, Greenwood, and Loxley soils, 0 to 1 percent slopes, is an undifferentiated group in this survey area.

This survey includes *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Talus is an example.

Michigan soil management groups are given in the descriptions. These groups are based on the dominant texture, the drainage class, and the major management concerns (Mokma and others, 1978). Additional information is available from the Michigan State University Extension.

Table 4 gives the acreage and proportionate extent of each map unit. Other tables give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils or miscellaneous areas.

7—Histosols and Aquents, 0 to 1 percent slopes, ponded

Setting

Landform: Marshes

Average Map Unit Composition

60 percent Histosols and similar soils

40 percent Aquents and similar soils

Typical Profile

Histosols

Oa—0 to 51 inches; muck

C—51 to 80 inches; variable

Aquents

C—0 to 80 inches; variable

Soil Properties and Qualities

Parent material: Histosols—organic material; Aquents—sandy or loamy alluvium

Slope: 0 to 1 percent

Hazard of soil blowing: Slight

Surface runoff class: Negligible

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Available water capacity: 20.5 inches (very high)
Shrink-swell potential: Histosols—low; Aquents—not rated
Permeability: Histosols—very slow; Aquents—not rated
Flooding: None
Depth to seasonal high water table: At the surface all year
Ponding depth: 1 foot all year

Interpretive Groups

Land capability classification: 8w
Michigan soil management group: None assigned
Habitat type: None assigned

Major Uses

Dominant use: Wildlife habitat
Other use: Recreation

10—Witbeck muck, 0 to 1 percent slopes

Setting

Landform: Depressions on ground moraines; flood plains on ground moraines;
outwash terraces

Average Map Unit Composition

90 percent Witbeck and similar soils
10 percent components of minor extent

Typical Profile

Witbeck

Oa—0 to 6 inches; muck
A—6 to 10 inches; silt loam
Bg—10 to 22 inches; fine sandy loam
Cg1—22 to 30 inches; very fine sandy loam
Cg2—30 to 39 inches; very fine sandy loam
Cg3—39 to 60 inches; gravelly fine sandy loam

Soil Properties and Qualities

Parent material: Organic material over coarse-loamy till
Slope: 0 to 1 percent
Hazard of soil blowing: Slight
Surface runoff class: Low
Potential for frost action: High
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Available water capacity: 7.1 inches (moderate)
Shrink-swell potential: Moderate
Permeability: Moderate
Flooding: None
Depth to seasonal high water table: At the surface (January, February, March, April,
May, October, November, December)
Depth and months of deepest ponding: 0.2 foot (January, February, March, April,
May, June, November, December)
Months in which ponding does not occur: July, August, September, October

Interpretive Groups

Land capability classification: 5w

Michigan soil management group: 3c

Habitat type: TTS

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

12A—Monico loam, 0 to 3 percent slopes

Setting

Landform: End moraines; ground moraines

Average Map Unit Composition

100 percent Monico and similar soils

Typical Profile

Monico

Oa—0 to 2 inches; highly decomposed plant material

A—2 to 4 inches; loam

E—4 to 7 inches; loam

Bs1—7 to 15 inches; sandy loam

Bs2—15 to 28 inches; sandy loam

Bw—28 to 38 inches; sandy loam

BC—38 to 47 inches; sandy loam

C—47 to 65 inches; sandy loam

Soil Properties and Qualities

Parent material: Coarse-loamy till over sandy and gravelly glaciofluvial deposits and/or coarse-loamy till

Slope: 0 to 3 percent

Hazard of soil blowing: Moderate

Surface runoff class: Low

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained

Available water capacity: 7.8 inches (moderate)

Shrink-swell potential: Moderate

Permeability: Moderate

Flooding: None

Depth to seasonal high water table: At the surface (April)

Ponding: None

Interpretive Groups

Land capability classification: 2e

Michigan soil management group: 3b-a

Habitat type: TMC-D

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

13B—Argonne fine sandy loam, 0 to 6 percent slopes

Setting

Landform: Ground moraines; drumlins

Average Map Unit Composition

83 percent Argonne and similar soils
17 percent components of minor extent

Typical Profile

Argonne

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 5 inches; fine sandy loam
Bs1—5 to 9 inches; sandy loam
Bs2—9 to 15 inches; sandy loam
E/B—15 to 29 inches; sandy loam
B/E—29 to 39 inches; sandy loam
Btx—39 to 54 inches; sandy loam
C—54 to 82 inches; gravelly sandy loam

Soil Properties and Qualities

Parent material: Brown coarse-loamy till
Slope: 0 to 6 percent
Hazard of soil blowing: Moderate
Surface runoff class: Low
Potential for frost action: High
Depth to restrictive feature: 39 inches to a fragipan
Drainage class: Moderately well drained
Available water capacity: 6.8 inches (moderate)
Shrink-swell potential: Moderate
Permeability: Moderate over slow over moderate or moderately rapid
Flooding: None
Depth to seasonal high water table: 1 to 2 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 2e
Michigan soil management group: 3a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Cropland, pasture

13C—Argonne fine sandy loam, 6 to 18 percent slopes

Setting

Landform: Ground moraines; drumlins

Average Map Unit Composition

83 percent Argonne and similar soils
17 percent components of minor extent

Typical Profile

Argonne

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 5 inches; fine sandy loam
Bs1—5 to 9 inches; sandy loam
Bs2—9 to 15 inches; sandy loam
E/B—15 to 29 inches; sandy loam
B/E—29 to 39 inches; sandy loam
Btx—39 to 54 inches; sandy loam
C—54 to 82 inches; gravelly sandy loam

Soil Properties and Qualities

Parent material: Brown coarse-loamy till
Slope: 6 to 18 percent
Hazard of soil blowing: Moderate
Surface runoff class: Medium
Potential for frost action: High
Depth to restrictive feature: 39 inches to a fragipan
Drainage class: Moderately well drained
Available water capacity: 6.8 inches (moderate)
Shrink-swell potential: Moderate
Permeability: Moderate over slow over moderate or moderately rapid
Flooding: None
Depth to seasonal high water table: 1 to 2 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 4e
Michigan soil management group: 3a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Cropland, pasture

13D—Argonne fine sandy loam, 18 to 35 percent slopes

Setting

Landform: Ground moraines; drumlins

Average Map Unit Composition

86 percent Argonne and similar soils
14 percent components of minor extent

Typical Profile

Argonne

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 5 inches; fine sandy loam
Bs1—5 to 9 inches; sandy loam
Bs2—9 to 15 inches; sandy loam
E/B—15 to 29 inches; sandy loam
B/E—29 to 39 inches; sandy loam

Btx—39 to 54 inches; sandy loam
C—54 to 82 inches; gravelly sandy loam

Soil Properties and Qualities

Parent material: Brown coarse-loamy till
Slope: 18 to 35 percent
Hazard of soil blowing: Moderate
Surface runoff class: High
Potential for frost action: High
Depth to restrictive feature: 39 inches to a fragipan
Drainage class: Moderately well drained
Available water capacity: 6.8 inches (moderate)
Shrink-swell potential: Moderate
Permeability: Moderate over slow over moderate or moderately rapid
Flooding: None
Depth to seasonal high water table: 1 to 2 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: 3a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other use: Wildlife habitat

15B—Wabeno silt loam, 1 to 6 percent slopes

Setting

Landform: End moraines; ground moraines

Average Map Unit Composition

100 percent Wabeno and similar soils

Typical Profile

Wabeno

A—0 to 2 inches; silt loam
E—2 to 4 inches; silt loam
Bs1—4 to 11 inches; silt loam
Bs2—11 to 23 inches; silt loam
B/E—23 to 32 inches; silt loam
B/Ex—32 to 42 inches; very fine sandy loam
2Btx—42 to 50 inches; sandy loam
2C—50 to 60 inches; sandy loam

Soil Properties and Qualities

Parent material: Coarse-silty eolian deposits over coarse-loamy till
Slope: 0 to 6 percent
Hazard of soil blowing: Slight
Surface runoff class: Low
Potential for frost action: Moderate
Depth to restrictive feature: 9 inches to a fragipan

Soil Survey of Gogebic County, Michigan

Drainage class: Moderately well drained

Available water capacity: 8.4 inches (moderate)

Shrink-swell potential: Moderate

Permeability: Moderate over slow over moderate or moderately rapid

Flooding: None

Depth to seasonal high water table: 2.3 to 2.4 feet (January, February, March, April, May, June, October, November, December)

Ponding: None

Interpretive Groups

Land capability classification: 2e

Michigan soil management group: 3a-af

Habitat type: AVO

Major Uses

Dominant use: Forestland

Other uses: Cropland, pasture

15C—Wabeno silt loam, 6 to 18 percent slopes

Setting

Landform: Ground moraines; end moraines

Average Map Unit Composition

100 percent Wabeno and similar soils

Typical Profile

Wabeno

A—0 to 2 inches; silt loam

E—2 to 4 inches; silt loam

Bs1—4 to 11 inches; silt loam

Bs2—11 to 23 inches; silt loam

B/E—23 to 32 inches; silt loam

B/Ex—32 to 42 inches; very fine sandy loam

2Btx—42 to 50 inches; sandy loam

2C—50 to 60 inches; sandy loam

Soil Properties and Qualities

Parent material: Coarse-silty eolian deposits over coarse-loamy till

Slope: 6 to 18 percent

Hazard of soil blowing: Slight

Surface runoff class: Medium

Potential for frost action: Moderate

Depth to restrictive feature: 9 inches to a fragipan

Drainage class: Moderately well drained

Available water capacity: 8.4 inches (moderate)

Shrink-swell potential: Moderate

Permeability: Moderate over slow over moderate or moderately rapid

Flooding: None

Depth to seasonal high water table: 2.3 to 2.4 feet (January, February, March, April, May, June, October, November, December)

Ponding: None

Interpretive Groups

Land capability classification: 4e

Michigan soil management group: 3a-af

Habitat type: AVO

Major Uses

Dominant use: Forestland

Other uses: Cropland, pasture

16A—Fence silt loam, 0 to 2 percent slopes

Setting

Landform: Lake plains; moraines; lake terraces

Average Map Unit Composition

100 percent Fence and similar soils

Typical Profile

Fence

A—0 to 6 inches; silt loam

E—6 to 7 inches; silt loam

Bs—7 to 13 inches; silt loam

E'—13 to 15 inches; silt loam

B/E1—15 to 20 inches; silt loam

B/E2—20 to 35 inches; silt loam

C—35 to 80 inches; stratified silt loam to silt

Soil Properties and Qualities

Parent material: Coarse-silty glaciolacustrine deposits

Slope: 0 to 2 percent

Hazard of soil blowing: Slight

Surface runoff class: Very low

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Available water capacity: 12 inches (high)

Shrink-swell potential: Low

Permeability: Moderately slow

Flooding: None

Depth to seasonal high water table: 1.5 to 7.0 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 2s

Michigan soil management group: 3a

Habitat type: AVO

Major Uses

Dominant use: Forestland

Other uses: Cropland, pasture

17B—Lode silt loam, 1 to 6 percent slopes

Setting

Landform: Ground moraines; outwash terraces

Average Map Unit Composition

85 percent Lode and similar soils

15 percent components of minor extent

Typical Profile

Lode

Ap—0 to 7 inches; silt loam

Bs1—7 to 18 inches; loam

Bs2—18 to 24 inches; loam

Bs3—24 to 31 inches; sandy loam

2BC—31 to 37 inches; coarse sand

2C1—37 to 59 inches; sand

2C2—59 to 80 inches; sand

Soil Properties and Qualities

Parent material: Coarse-loamy eolian deposits over sandy glaciofluvial deposits

Slope: 1 to 6 percent

Hazard of soil blowing: Slight

Surface runoff class: Low

Potential for frost action: Moderate

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Available water capacity: 7.6 inches (moderate)

Shrink-swell potential: Moderate

Permeability: Moderate

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 3s

Michigan soil management group: 3/5a-a

Habitat type: TM

Major Uses

Dominant use: Forestland

Other uses: Cropland, pasture

17C—Lode silt loam, 6 to 18 percent slopes

Setting

Landform: Ground moraines; outwash terraces

Average Map Unit Composition

86 percent Lode and similar soils

14 percent components of minor extent

Typical Profile

Lode

Ap—0 to 7 inches; silt loam
Bs1—7 to 18 inches; loam
Bs2—18 to 24 inches; loam
Bs3—24 to 31 inches; sandy loam
2BC—31 to 37 inches; coarse sand
2C1—37 to 59 inches; sand
2C2—59 to 80 inches; sand

Soil Properties and Qualities

Parent material: Coarse-loamy eolian deposits over sandy glaciofluvial deposits
Slope: 6 to 18 percent
Hazard of soil blowing: Slight
Surface runoff class: Medium
Potential for frost action: Moderate
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Available water capacity: 7.6 inches (moderate)
Shrink-swell potential: Moderate
Permeability: Moderate
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 4e
Michigan soil management group: 3/5a-a
Habitat type: TM

Major Uses

Dominant use: Forestland
Other uses: Cropland, pasture

20B—Pence-Lode complex, 1 to 6 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

62 percent Pence and similar soils
30 percent Lode and similar soils
8 percent components of minor extent

Typical Profile

Pence

Oe—0 to 2 inches; moderately decomposed plant material
E—2 to 6 inches; fine sandy loam
Bs1—6 to 9 inches; fine sandy loam
Bs2—9 to 13 inches; fine sandy loam
2Bs3—13 to 16 inches; coarse sand

2BC—16 to 31 inches; coarse sand
2C—31 to 80 inches; gravelly coarse sand, sand

Lode

Ap—0 to 7 inches; silt loam
Bs1—7 to 18 inches; loam
Bs2—18 to 24 inches; loam
Bs3—24 to 31 inches; sandy loam
2BC—31 to 37 inches; coarse sand
2C1—37 to 59 inches; sand
2C2—59 to 80 inches; sand

Soil Properties and Qualities

Parent material: Pence—loamy eolian deposits over stratified sandy outwash; Lode—coarse-loamy eolian deposits over sandy glaciofluvial deposits
Slope: 1 to 6 percent
Hazard of soil blowing: Pence—moderate; Lode—slight
Surface runoff class: Low
Potential for frost action: Pence—low; Lode—moderate
Depth to restrictive feature: More than 80 inches
Drainage class: Pence—somewhat excessively drained; Lode—well drained
Available water capacity: Pence—4.1 inches (low); Lode—7.6 inches (moderate)
Shrink-swell potential: Moderate
Permeability: Pence—moderately rapid; Lode—moderate
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 3s
Michigan soil management group: Pence—4a-a; Lode—3/5a-a
Habitat type: Pence—TMV; Lode—TM

Major Uses

Dominant use: Forestland
Other uses: Cropland, pasture

20C—Pence fine sandy loam, 6 to 18 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

86 percent Pence and similar soils
14 percent components of minor extent

Typical Profile

Pence

Oe—0 to 2 inches; moderately decomposed plant material
E—2 to 6 inches; fine sandy loam
Bs1—6 to 9 inches; fine sandy loam
Bs2—9 to 13 inches; fine sandy loam
2Bs3—13 to 16 inches; coarse sand

2BC—16 to 31 inches; coarse sand

2C—31 to 80 inches; gravelly coarse sand, sand

Soil Properties and Qualities

Parent material: Loamy eolian deposits over stratified sandy outwash

Slope: 6 to 18 percent

Hazard of soil blowing: Moderate

Surface runoff class: Low

Potential for frost action: Low

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Available water capacity: 4.1 inches (low)

Shrink-swell potential: Moderate

Permeability: Moderately rapid

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 6e

Michigan soil management group: 4a-a

Habitat type: TMV

Major Uses

Dominant use: Forestland

Other uses: Cropland, pasture

21—Minocqua-Leafriver complex, 0 to 1 percent slopes

Setting

Landform: Drainageways and depressions on outwash plains and stream terraces

Average Map Unit Composition

60 percent Minocqua and similar soils

30 percent Leafriver and similar soils

10 percent components of minor extent

Typical Profile

Minocqua

Oe—0 to 4 inches; muck

Eg—4 to 15 inches; silt loam

2Bg—15 to 28 inches; loam

3C—28 to 60 inches; stratified sand to gravelly coarse sand

Leafriver

Oi—0 to 1 inch; slightly decomposed plant material

Oa—1 to 14 inches; muck

Cg—14 to 16 inches; loamy sand

C—16 to 51 inches; sand, gravelly coarse sand

Soil Properties and Qualities

Parent material: Minocqua—silty and loamy alluvium underlain by sandy and gravelly outwash; Leafriver—sandy glaciofluvial deposits

Soil Survey of Gogebic County, Michigan

Slope: 0 to 1 percent

Hazard of soil blowing: Minocqua—slight; Leafriver—moderate

Surface runoff class: Negligible

Potential for frost action: Minocqua—high; Leafriver—moderate

Depth to restrictive feature: More than 80 inches

Drainage class: Minocqua—poorly drained; Leafriver—very poorly drained

Available water capacity: Minocqua—6.2 inches (moderate); Leafriver—1.3 inches (very low)

Shrink-swell potential: Minocqua—low; Leafriver—moderate

Permeability: Minocqua—moderate; Leafriver—rapid

Flooding: None

Depth to seasonal high water table: Minocqua—at the surface (April, May, November); Leafriver—at the surface (January, February, March, April, May, October, November, December)

Depth and months of deepest ponding: Minocqua—0.5 foot (April, May); Leafriver—0.2 foot (March, April, May, October, November)

Months in which ponding does not occur: Minocqua—January, February, March, June, July, August, September, October, November, December; Leafriver—January, February, June, July, August, September, December

Interpretive Groups

Land capability classification: 6w

Michigan soil management group: Minocqua—4c; Leafriver—5C

Habitat type: Minocqua—TMC; Leafriver—TTS

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

23B—Chabeneau-Karlin-Pence complex, 1 to 6 percent slopes

Setting

Landform: Ground moraines; outwash terraces

Average Map Unit Composition

57 percent Chabeneau and similar soils

28 percent Karlin and similar soils

15 percent Pence and similar soils

Typical Profile

Chabeneau

Oe—0 to 1 inch; moderately decomposed plant material

A—1 to 2 inches; cobbly fine sandy loam

E—2 to 5 inches; silt loam

Bs1—5 to 10 inches; silt loam

Bs2—10 to 22 inches; silt loam

2BC—22 to 30 inches; gravelly loamy sand

2C1—30 to 48 inches; stratified coarse sand to very gravelly coarse sand

2C2—48 to 121 inches; stratified sand to gravelly sand

Karlin

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 4 inches; fine sandy loam

Bs—4 to 15 inches; sandy loam

2BC—15 to 29 inches; sand

2C—29 to 80 inches; sand

Pence

Oe—0 to 2 inches; moderately decomposed plant material

E—2 to 6 inches; fine sandy loam

Bs1—6 to 9 inches; fine sandy loam

Bs2—9 to 13 inches; fine sandy loam

2Bs3—13 to 16 inches; coarse sand

2BC—16 to 31 inches; coarse sand

2C—31 to 80 inches; gravelly coarse sand, sand

Soil Properties and Qualities

Parent material: Chabeneau—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits; Karlin—sandy glaciofluvial deposits; Pence—loamy eolian deposits over stratified sandy outwash

Slope: Chabeneau—1 to 4 percent; Karlin—1 to 6 percent; Pence—1 to 6 percent

Hazard of soil blowing: Chabeneau—slight; Karlin and Pence—moderate

Surface runoff class: Chabeneau and Pence—low; Karlin—very low

Potential for frost action: Chabeneau—moderate; Karlin and Pence—low

Depth to restrictive feature: More than 80 inches

Drainage class: Chabeneau—moderately well drained; Karlin and Pence—somewhat excessively drained

Available water capacity: Chabeneau—5.7 inches (low); Karlin—5.8 inches (low); Pence—4.1 inches (low)

Shrink-swell potential: Low

Permeability: Chabeneau—moderate; Karlin and Pence—moderately rapid

Flooding: None

Depth to seasonal high water table: Chabeneau—2 to 7 feet (April, May); Karlin and Pence—more than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: Chabeneau—6s; Karlin and Pence—3s

Michigan soil management group: Chabeneau—3/5a; Karlin and Pence—4a

Habitat type: Chabeneau—TM; Karlin—ATD; Pence—TMV

Major Uses

Dominant use: Forestland

Other uses: Cropland, pasture

26B—Stambaugh silt loam, 1 to 6 percent slopes

Setting

Landform: Kame terraces

Average Map Unit Composition

90 percent Stambaugh and similar soils

10 percent components of minor extent

Typical Profile

Stambaugh

A—0 to 4 inches; silt loam
Bs1—4 to 10 inches; silt loam
Bs2—10 to 18 inches; silt loam
E—18 to 22 inches; silt loam
B/E—22 to 39 inches; silt loam
2C1—39 to 50 inches; very gravelly sand
2C2—50 to 80 inches; gravelly sand

Soil Properties and Qualities

Parent material: Sandy and gravelly outwash
Slope: 1 to 6 percent
Hazard of soil blowing: Slight
Surface runoff class: Low
Potential for frost action: High
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Available water capacity: 8.6 inches (moderate)
Shrink-swell potential: Moderate
Permeability: Moderate
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 3s
Michigan soil management group: 3/5a-a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Cropland, pasture

27—Lupton and Tawas mucks, 0 to 1 percent slopes

Setting

Landform: Swamps on till plains

Average Map Unit Composition

0 to 100 percent Lupton and similar soils
0 to 100 percent Tawas and similar soils
2 percent components of minor extent

Typical Profile

Lupton

Oa1—0 to 8 inches; muck
Oa2—8 to 80 inches; muck

Tawas

Oa—0 to 22 inches; muck
C1—22 to 42 inches; sand
C2—42 to 80 inches; gravelly sand

Soil Properties and Qualities

Parent material: Lupton—organic material; Tawas—highly decomposed organic material over sandy drift

Slope: 0 to 1 percent

Hazard of soil blowing: Moderate

Surface runoff class: Negligible

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Available water capacity: Lupton—3.1 inches (low); Tawas—11.1 inches (high)

Shrink-swell potential: Lupton—not rated; Tawas—low

Permeability: Lupton—moderately rapid; Tawas—rapid

Flooding: None

Depth to seasonal high water table: At the surface (January, February, March, April, May, June, October, November, December)

Depth and months of deepest ponding: 0.2 foot (March, April, May, June, October, November)

Months in which ponding does not occur: January, February, July, August, September, December

Interpretive Groups

Land capability classification: 6w

Michigan soil management group: Lupton—Mc; Tawas—M/4c

Habitat type: TTS

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

28—Dawson, Greenwood, and Loxley soils, 0 to 1 percent slopes

Setting

Landform: Bogs on lake plains, moraines, and outwash plains

Average Map Unit Composition

0 to 100 percent Dawson and similar soils

0 to 100 percent Greenwood and similar soils

0 to 100 percent Loxley and similar soils

Typical Profile

Dawson

Oi—0 to 4 inches; peat

Oe—4 to 9 inches; mucky peat

Oa—9 to 34 inches; muck

E—34 to 36 inches; loamy sand

Bhs—36 to 39 inches; sand

Bs—39 to 50 inches; sand

C—50 to 62 inches; sand

Greenwood

Oi—0 to 8 inches; peat

Oa—8 to 11 inches; muck

Oe1—11 to 65 inches; mucky peat
Oe2—65 to 80 inches; mucky peat

Loxley

Oi—0 to 5 inches; peat
Oa—5 to 45 inches; muck
Oe—45 to 80 inches; mucky peat

Soil Properties and Qualities

Parent material: Dawson—herbaceous material over sandy glaciofluvial deposits;
Greenwood and Loxley—herbaceous material
Slope: 0 to 1 percent
Hazard of soil blowing: Slight
Surface runoff class: Negligible
Potential for frost action: High
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Available water capacity: 16.6 to 31.8 inches (very high)
Shrink-swell potential: Dawson and Greenwood—low; Loxley—not rated
Permeability: Dawson—moderately slow; Greenwood and Loxley—moderately rapid
Flooding: None
Depth to seasonal high water table: At the surface (January, February, March, April,
May, June, September, October, November, December)
Depth and months of deepest ponding: 0.5 foot (April, May)
Months in which ponding does not occur: July, August, September

Interpretive Groups

Land capability classification: 7w
Michigan soil management group: Dawson and Greenwood—Mc-a; Loxley—M/4c-a
Habitat type: PCS

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

**29B—Pence sandy loam, very deep water table, 1 to 6
percent slopes**

Setting

Landform: Outwash plains

Average Map Unit Composition

85 percent Pence and similar soils
15 percent components of minor extent

Typical Profile

Pence

Oe—0 to 2 inches; moderately decomposed plant material
E—2 to 6 inches; sandy loam
Bs1—6 to 9 inches; fine sandy loam
Bs2—9 to 13 inches; fine sandy loam
2Bs3—13 to 16 inches; coarse sand

2BC—16 to 31 inches; coarse sand

2C—31 to 80 inches; very gravelly coarse sand, sand

Soil Properties and Qualities

Parent material: Loamy eolian deposits over stratified sandy outwash

Slope: 1 to 6 percent

Hazard of soil blowing: Moderate

Surface runoff class: Low

Potential for frost action: Low

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Available water capacity: 4.2 inches (low)

Shrink-swell potential: Moderate

Permeability: Moderately rapid

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 3s

Michigan soil management group: 4a

Habitat type: TMV

Major Uses

Dominant use: Forestland

Other uses: Cropland, pasture

31—Evert-Tawas complex, 0 to 1 percent slopes, frequently flooded

Setting

Landform: Flood plains on outwash terraces

Average Map Unit Composition

55 percent Evert and similar soils

45 percent Tawas and similar soils

Typical Profile

Evert

Oa—0 to 2 inches; muck

A—2 to 9 inches; loam

Eg—9 to 19 inches; sandy loam

Cg1—19 to 33 inches; very gravelly loamy sand

Cg2—33 to 55 inches; very gravelly coarse sand

Tawas

Oa—0 to 22 inches; muck

C1—22 to 42 inches; sand

C2—42 to 80 inches; gravelly sand

Soil Properties and Qualities

Parent material: Evert—sandy alluvium; Tawas—highly decomposed organic material over sandy drift

Soil Survey of Gogebic County, Michigan

Slope: 0 to 1 percent

Hazard of soil blowing: Moderate

Surface runoff class: Negligible

Potential for frost action: Evert—moderate; Tawas—high

Depth to restrictive feature: More than 80 inches

Drainage class: Evert—poorly drained; Tawas—very poorly drained

Available water capacity: Evert—3.8 inches (low); Tawas—11.1 inches (high)

Shrink-swell potential: Evert—moderate; Tawas—low

Permeability: Evert—moderate; Tawas—rapid

Frequency of flooding: Evert—frequent (April, May); Tawas—none

Depth to seasonal high water table: Evert—at the surface (March, April, May, November, December); Tawas—at the surface (January, February, March, April, May, June, October, November, December)

Depth and months of deepest ponding: Evert—0.5 foot (April, May); Tawas—0.2 foot (March, April, May, June, October, November)

Months in which ponding does not occur: Evert—January, July, August, December; Tawas—January, February, July, August, September, December

Interpretive Groups

Land capability classification: 7w

Michigan soil management group: Evert—L-4c; Tawas—M/4c

Habitat type: FMC-C

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

32A—Net loam, 0 to 2 percent slopes

Setting

Landform: Drainageways and depressions on ground moraines and end moraines

Average Map Unit Composition

100 percent Net and similar soils

Typical Profile

Net

Oi—0 to 2 inches; slightly decomposed plant material

A—2 to 5 inches; loam

E—5 to 6 inches; gravelly silt loam

Bhs—6 to 7 inches; gravelly loam

Bs1—7 to 15 inches; gravelly silt loam

2Bs2—15 to 23 inches; gravelly fine sandy loam

2Bx—23 to 39 inches; gravelly sandy loam

2C—39 to 60 inches; gravelly sandy loam

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy or sandy gravelly till

Slope: 0 to 2 percent

Hazard of soil blowing: Slight

Surface runoff class: Low

Potential for frost action: High

Depth to restrictive feature: 15 to 30 inches to a fragipan

Soil Survey of Gogebic County, Michigan

Drainage class: Somewhat poorly drained

Available water capacity: 5 inches (low)

Shrink-swell potential: Low

Permeability: Very slow

Flooding: None

Depth to seasonal high water table: 1.0 to 1.7 feet (January, February, March, April, May, November, December)

Ponding: None

Interpretive Groups

Land capability classification: 7s

Michigan soil management group: 3b-af

Habitat type: TMC

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

35A—Beechwood muck, 0 to 4 percent slopes

Setting

Landform: End moraines; ground moraines

Average Map Unit Composition

85 percent Beechwood and similar soils

15 percent components of minor extent

Typical Profile

Beechwood

Oa—0 to 6 inches; muck

A—6 to 8 inches; silt loam

Bw1—8 to 10 inches; loam

Bw2—10 to 20 inches; fine sandy loam

Bw3—20 to 28 inches; fine sandy loam

Bw4—28 to 42 inches; fine sandy loam

BC—42 to 80 inches; fine sandy loam

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over coarse-loamy till

Slope: 0 to 4 percent

Hazard of soil blowing: Moderate

Surface runoff class: Low

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained

Available water capacity: 10.1 inches (high)

Shrink-swell potential: Moderate

Permeability: Moderate

Flooding: None

Depth to seasonal high water table: 6 inches (April)

Ponding: None

Interpretive Groups

Land capability classification: 2e
Michigan soil management group: 3b-a
Habitat type: TMC-D

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

36—Gay-Pleine complex, 0 to 1 percent slopes, stony

Setting

Landform: Depressions on till plains

Average Map Unit Composition

58 percent Gay and similar soils
30 percent Pleine and similar soils
12 percent components of minor extent

Typical Profile

Gay

Oa—0 to 4 inches; muck
A—4 to 7 inches; fine sandy loam
Eg—7 to 11 inches; sandy loam
Bw—11 to 16 inches; sandy loam
BC—16 to 30 inches; sandy loam
C—30 to 80 inches; sandy loam

Pleine

Oa—0 to 9 inches; very cobbly muck
Bg—9 to 20 inches; very fine sandy loam
Bw—20 to 33 inches; fine sandy loam
C—33 to 80 inches; gravelly sandy loam

Soil Properties and Qualities

Parent material: Coarse-loamy till
Slope: 0 to 1 percent
Hazard of soil blowing: Gay—moderate; Pleine—slight
Surface runoff class: Gay—negligible; Pleine—very low
Potential for frost action: High
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Available water capacity: Gay—8.1 inches (moderate); Pleine—11.7 inches (high)
Shrink-swell potential: Low
Permeability: Moderate
Flooding: None
Depth to seasonal high water table: Gay—at the surface (January, February, March, April, May, October, November, December); Pleine—at the surface (January, February, March, April, May, November, December)
Depth and months of deepest ponding: Gay—0.3 foot (March, April, May, October, November); Pleine—0.2 foot (March, April, May, June, October, November)

Months in which ponding does not occur: Gay—January, February, June, July, August, September, December; Pleine—January, February, July, August, September, December

Interpretive Groups

Land capability classification: 5w

Michigan soil management group: 3c

Habitat type: F1

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

37B—Gogebic-Tula-Lupton complex, 0 to 6 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

51 percent Gogebic and similar soils

31 percent Tula and similar soils

15 percent Lupton and similar soils

3 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; silt loam

E—5 to 8 inches; silt loam

Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam

2E/Bx—20 to 33 inches; gravelly fine sandy loam

2B/Ex—33 to 49 inches; fine sandy loam

2Bt—49 to 54 inches; fine sandy loam

2BC—54 to 68 inches; fine sandy loam

2C—68 to 80 inches; gravelly fine sandy loam

Tula

Oa—0 to 1 inch; highly decomposed plant material

A—1 to 5 inches; cobbly very fine sandy loam

E—5 to 8 inches; cobbly very fine sandy loam

Bs1—8 to 20 inches; cobbly very fine sandy loam

Bs2—20 to 28 inches; gravelly sandy loam

2E/Bx—28 to 37 inches; gravelly sandy loam

2B/Ex—37 to 62 inches; gravelly loam

2C—62 to 80 inches; gravelly sandy loam

Lupton

Oa1—0 to 8 inches; muck

Oa2—8 to 80 inches; muck

Soil Properties and Qualities

Parent material: Gogebic and Tula—modified loamy eolian deposits over loamy till over sandy till; Lupton—highly decomposed organic material
Slope: Gogebic—1 to 6 percent; Tula—0 to 3 percent; Lupton—0 to 1 percent
Hazard of soil blowing: Gogebic—slight; Tula and Lupton—moderate
Surface runoff class: Gogebic and Tula—low; Lupton—negligible
Potential for frost action: Gogebic—moderate; Tula and Lupton—high
Depth to restrictive feature: Gogebic and Tula—20 to 28 inches to a fragipan; Lupton—more than 80 inches
Drainage class: Gogebic—moderately well drained; Tula—somewhat poorly drained; Lupton—very poorly drained
Available water capacity: Gogebic—5.5 inches (low); Tula—7.2 inches (moderate); Lupton—23.9 inches (very high)
Shrink-swell potential: Gogebic and Tula—moderate; Lupton—low
Permeability: Gogebic and Tula—very slow; Lupton—rapid
Flooding: None
Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Tula—0.5 foot to 2.5 feet (April, May); Lupton—at the surface (January, February, March, April, May, June, October, November, December)
Depth and months of deepest ponding: Gogebic and Tula—none; Lupton—0.2 foot (March, April, May, June, October, November)
Months in which ponding does not occur: Lupton—January, February, July, August, September, December

Interpretive Groups

Land capability classification: 2e
Michigan soil management group: Gogebic—3a-af; Tula—3b-af; Lupton—Mc
Habitat type: Gogebic—TMC-D; Tula—TMC; Lupton—TTS

Major Uses

Dominant use: Forestland
Other uses: Cropland, pasture

38B—Gogebic fine sandy loam, sandy substratum, 1 to 6 percent slopes, stony

Setting

Landform: Till plains

Average Map Unit Composition

95 percent Gogebic and similar soils
5 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; fine sandy loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam

2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
3C—68 to 80 inches; gravelly sand

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till over sandy till
Slope: 1 to 6 percent
Hazard of soil blowing: Slight
Surface runoff class: Low
Potential for frost action: Moderate
Depth to restrictive feature: 20 inches to a fragipan
Drainage class: Moderately well drained
Available water capacity: 5.5 inches (low)
Shrink-swell potential: Moderate
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: 1 to 2 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 4e
Michigan soil management group: 3a-af
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Cropland, pasture

38C—Gogebic fine sandy loam, sandy substratum, 6 to 18 percent slopes, stony

Setting

Landform: Till plains

Average Map Unit Composition

95 percent Gogebic and similar soils
5 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; fine sandy loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
3C—68 to 80 inches; gravelly sand

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till over sandy till
Slope: 6 to 18 percent
Hazard of soil blowing: Slight
Surface runoff class: Medium
Potential for frost action: Moderate
Depth to restrictive feature: 20 inches to a fragipan
Drainage class: Moderately well drained
Available water capacity: 5.5 inches (low)
Shrink-swell potential: Moderate
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: 1 to 2 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 6e
Michigan soil management group: 3a-af
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Cropland, pasture

38D—Gogebic fine sandy loam, sandy substratum, 18 to 35 percent slopes, stony

Setting

Landform: Till plains

Average Map Unit Composition

95 percent Gogebic and similar soils
5 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; fine sandy loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
3C—68 to 80 inches; gravelly sand

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till over sandy till
Slope: 18 to 35 percent
Hazard of soil blowing: Slight
Surface runoff class: High

Potential for frost action: Moderate
Depth to restrictive feature: 20 inches to a fragipan
Drainage class: Moderately well drained
Available water capacity: 5.5 inches (low)
Shrink-swell potential: Moderate
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: 1 to 2 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: 3a-af
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

39B—Gogebic silt loam, sandy substratum, 1 to 6 percent slopes, stony

Setting

Landform: Till plains

Average Map Unit Composition

85 percent Gogebic and similar soils
15 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; silt loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
3C—68 to 80 inches; gravelly sand

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till over sandy till
Slope: 1 to 6 percent
Hazard of soil blowing: Slight
Surface runoff class: Low
Potential for frost action: Moderate
Depth to restrictive feature: 20 inches to a fragipan
Drainage class: Moderately well drained
Available water capacity: 5.5 inches (low)
Shrink-swell potential: Moderate
Permeability: Very slow

Flooding: None
Depth to seasonal high water table: 1 to 2 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 4e
Michigan soil management group: 3a-af
Habitat type: AVO

Major Uses

Dominant use: Forestland
Other uses: Cropland, pasture

39C—Gogebic silt loam, sandy substratum, 6 to 18 percent slopes, stony

Setting

Landform: Till plains

Average Map Unit Composition

85 percent Gogebic and similar soils
15 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; silt loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
3C—68 to 80 inches; gravelly sand

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till over sandy till
Slope: 6 to 18 percent
Hazard of soil blowing: Slight
Surface runoff class: Medium
Potential for frost action: Moderate
Depth to restrictive feature: 20 inches to a fragipan
Drainage class: Moderately well drained
Available water capacity: 5.5 inches (low)
Shrink-swell potential: Moderate
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: 1 to 2 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 6e

Michigan soil management group: 3a-af

Habitat type: AVO

Major Uses

Dominant use: Forestland

Other uses: Cropland, pasture

39D—Gogebic silt loam, sandy substratum, 18 to 35 percent slopes, stony

Setting

Landform: Till plains

Average Map Unit Composition

85 percent Gogebic and similar soils

15 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; silt loam

E—5 to 8 inches; silt loam

Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam

2E/Bx—20 to 33 inches; gravelly fine sandy loam

2B/Ex—33 to 49 inches; fine sandy loam

2Bt—49 to 54 inches; fine sandy loam

2BC—54 to 68 inches; fine sandy loam

3C—68 to 80 inches; gravelly sand

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till over sandy till

Slope: 18 to 35 percent

Hazard of soil blowing: Slight

Surface runoff class: High

Potential for frost action: Moderate

Depth to restrictive feature: 20 inches to a fragipan

Drainage class: Moderately well drained

Available water capacity: 5.5 inches (low)

Shrink-swell potential: Moderate

Permeability: Very slow

Flooding: None

Depth to seasonal high water table: 1 to 2 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: 3a-af

Habitat type: AVO

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

41—Lupton-Pleine-Cathro complex, 0 to 1 percent slopes

Setting

Landform: Swamps on till plain

Average Map Unit Composition

60 percent Lupton and similar soils

23 percent Pleine and similar soils

15 percent Cathro and similar soils

2 percent components of minor extent

Typical Profile

Lupton

Oa1—0 to 8 inches; muck

Oa2—8 to 80 inches; muck

Pleine

Oa—0 to 9 inches; very cobbly muck

Bg—9 to 20 inches; very fine sandy loam

Bw—20 to 33 inches; fine sandy loam

C—33 to 80 inches; gravelly sandy loam

Cathro

Oa1—0 to 6 inches; muck

Oa2—6 to 31 inches; muck

Cg—31 to 80 inches; fine sandy loam

Soil Properties and Qualities

Parent material: Lupton—highly decomposed organic material; Pleine—coarse-loamy till; Cathro—herbaceous material over loamy drift

Slope: 0 to 1 percent

Hazard of soil blowing: Lupton—moderate; Pleine and Cathro—slight

Surface runoff class: Lupton and Cathro—negligible; Pleine—very low

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Lupton and Cathro—very poorly drained; Pleine—poorly drained

Available water capacity: 11.7 to 23.9 inches (very high)

Shrink-swell potential: Lupton and Pleine—low; Cathro—moderate

Permeability: Lupton—rapid; Pleine and Cathro—moderate

Flooding: None

Depth to seasonal high water table: Lupton and Cathro—at the surface (January, February, March, April, May, June, October, November, December); Pleine—at the surface (January, February, March, April, May, November, December)

Depth and months of deepest ponding: 0.2 foot (March, April, May, June, October, November)

Months in which ponding does not occur: January, February, July, August, September, December

Interpretive Groups

Land capability classification: 6w

Michigan soil management group: Lupton—Mc; Pleine—3c; Cathro—M/3c

Habitat type: TTS

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

42—Ausable, frequently flooded-Tawas complex, 0 to 1 percent slopes

Setting

Landform: Flood plains

Average Map Unit Composition

70 percent Ausable and similar soils

25 percent Tawas and similar soils

5 percent components of minor extent

Typical Profile

Ausable

Oa—0 to 8 inches; muck

C1—8 to 16 inches; sand

C2—16 to 25 inches; stratified muck to sand to loamy fine sand

Cg1—25 to 36 inches; very gravelly sand

Cg2—36 to 45 inches; very gravelly sand

Cg3—45 to 80 inches; very gravelly coarse sand

Tawas

Oa—0 to 22 inches; muck

C1—22 to 42 inches; sand

C2—42 to 80 inches; gravelly sand

Soil Properties and Qualities

Parent material: Ausable—organic material over sandy alluvium; Tawas—highly decomposed organic material over sandy drift

Slope: 0 to 1 percent

Hazard of soil blowing: Moderate

Surface runoff class: Negligible

Potential for frost action: Ausable—moderate; Tawas—high

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Available water capacity: Ausable—6 inches (moderate); Tawas—11.1 inches (high)

Shrink-swell potential: Low

Permeability: Rapid

Highest frequency of flooding: Ausable—frequent (April, May); Tawas—none

Depth to seasonal high water table: At the surface (January, February, March, April, May, June, October, November, December)

Depth and months of deepest ponding: Ausable—none; Tawas—0.2 foot (March, April, May, June, October, November)

Months in which ponding does not occur: Tawas—January, February, July, August, September, December

Interpretive Groups

Land capability classification: 7w

Michigan soil management group: Ausable—L-4c; Tawas—M/4c

Habitat type: FMC-C

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

43B—Karlin-Pence complex, 1 to 6 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

55 percent Karlin and similar soils

40 percent Pence and similar soils

5 percent components of minor extent

Typical Profile

Karlin

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 4 inches; loamy fine sand

Bs—4 to 15 inches; sandy loam

2BC—15 to 29 inches; sand

2C—29 to 80 inches; sand

Pence

Oe—0 to 2 inches; moderately decomposed plant material

E—2 to 6 inches; fine sandy loam

Bs1—6 to 9 inches; fine sandy loam

Bs2—9 to 13 inches; fine sandy loam

2Bs3—13 to 16 inches; coarse sand

2BC—16 to 31 inches; coarse sand

2C—31 to 80 inches; gravelly coarse sand, sand

Soil Properties and Qualities

Parent material: Karlin—sandy glaciofluvial deposits; Pence—loamy eolian deposits over stratified sandy outwash

Slope: 1 to 6 percent

Hazard of soil blowing: Moderate

Surface runoff class: Karlin—very low; Pence—low

Potential for frost action: Low

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Available water capacity: 4.1 to 5.8 inches (low)

Shrink-swell potential: Karlin—low; Pence—moderate

Permeability: Moderately rapid

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 3s

Michigan soil management group: Karlin—4a; Pence—4a-a

Habitat type: TM

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

43C—Karlin-Pence complex, 6 to 18 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

55 percent Karlin and similar soils

40 percent Pence and similar soils

5 percent components of minor extent

Typical Profile

Karlin

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 4 inches; loamy fine sand

Bs—4 to 15 inches; sandy loam

2BC—15 to 29 inches; sand

2C—29 to 80 inches; sand

Pence

Oe—0 to 2 inches; moderately decomposed plant material

E—2 to 6 inches; fine sandy loam

Bs1—6 to 9 inches; fine sandy loam

Bs2—9 to 13 inches; fine sandy loam

2Bs3—13 to 16 inches; coarse sand

2BC—16 to 31 inches; coarse sand

2C—31 to 80 inches; gravelly coarse sand, sand

Soil Properties and Qualities

Parent material: Karlin—sandy glaciofluvial deposits; Pence—loamy eolian deposits
over stratified sandy outwash

Slope: 6 to 18 percent

Hazard of soil blowing: Moderate

Surface runoff class: Low

Potential for frost action: Low

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Available water capacity: 4.1 to 5.8 inches (low)

Shrink-swell potential: Karlin—low; Pence—moderate

Permeability: Moderately rapid

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 4e

Michigan soil management group: Karlin—4a; Pence—4a-a

Habitat type: TM

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

43D—Karlin-Pence complex, 18 to 35 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

55 percent Karlin and similar soils

40 percent Pence and similar soils

5 percent components of minor extent

Typical Profile

Karlin

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 4 inches; loamy fine sand

Bs—4 to 15 inches; sandy loam

2BC—15 to 29 inches; sand

2C—29 to 80 inches; sand

Pence

Oe—0 to 2 inches; moderately decomposed plant material

E—2 to 6 inches; fine sandy loam

Bs1—6 to 9 inches; fine sandy loam

Bs2—9 to 13 inches; fine sandy loam

2Bs3—13 to 16 inches; coarse sand

2BC—16 to 31 inches; coarse sand

2C—31 to 80 inches; gravelly coarse sand, sand

Soil Properties and Qualities

Parent material: Karlin—sandy glaciofluvial deposits; Pence—loamy eolian deposits
over stratified sandy outwash

Slope: 18 to 35 percent

Hazard of soil blowing: Moderate

Surface runoff class: Medium

Potential for frost action: Low

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Available water capacity: 4.1 to 5.8 inches (low)

Shrink-swell potential: Karlin—low; Pence—moderate

Permeability: Moderately rapid

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: Karlin—4a; Pence—4a-a

Habitat type: TM

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

44B—Karlin-Keweenaw-Sarona, dense substratum, complex, 1 to 6 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

36 percent Karlin and similar soils

30 percent Keweenaw and similar soils

25 percent Sarona and similar soils

9 percent components of minor extent

Typical Profile

Karlin

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 4 inches; loamy fine sand

Bs—4 to 15 inches; sandy loam

2BC—15 to 29 inches; sand

2C—29 to 80 inches; sand

Keweenaw

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 4 inches; loamy sand

Bhs—4 to 6 inches; loamy fine sand

Bs—6 to 25 inches; loamy fine sand

E/B—25 to 45 inches; stratified sand to fine sand to loamy fine sand to loamy very fine sand

B/E—45 to 56 inches; stratified loamy fine sand to fine sand to fine sandy loam

E/B'—56 to 71 inches; stratified loamy fine sand to fine sand to fine sandy loam

B/E'—71 to 90 inches; stratified loamy fine sand to fine sandy loam

Sarona

A—0 to 3 inches; sandy loam

E—3 to 6 inches; fine sandy loam

Bs1—6 to 14 inches; fine sandy loam

Bs2—14 to 21 inches; fine sandy loam

Bs3—21 to 28 inches; sandy loam

B/E—28 to 47 inches; loamy sand

BC—47 to 75 inches; loamy sand

Cd—75 to 90 inches; loamy sand

Soil Properties and Qualities

Parent material: Karlin and Keweenaw—sandy glaciofluvial deposits; Sarona—coarse-loamy till

Soil Survey of Gogebic County, Michigan

Slope: 1 to 6 percent

Hazard of soil blowing: Moderate

Surface runoff class: Karlin—very low; Keweenaw—medium; Sarona—low

Potential for frost action: Low

Depth to restrictive feature: Karlin and Keweenaw—more than 80 inches; Sarona—75 inches to dense material

Drainage class: Karlin—somewhat excessively drained; Keweenaw and Sarona—well drained

Available water capacity: Karlin and Keweenaw—3.7 to 5.8 inches (low); Sarona—8.3 inches (moderate)

Shrink-swell potential: Karlin and Keweenaw—low; Sarona—moderate

Permeability: Karlin—moderately rapid; Keweenaw—moderately slow; Sarona—moderate

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 3s

Michigan soil management group: Karlin—4a; Keweenaw—4a-a; Sarona—3a

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

44C—Karlin-Keweenaw-Sarona, dense substratum, complex, 6 to 25 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

36 percent Karlin and similar soils

30 percent Keweenaw and similar soils

25 percent Sarona and similar soils

9 percent components of minor extent

Typical Profile

Karlin

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 4 inches; loamy fine sand

Bs—4 to 15 inches; sandy loam

2BC—15 to 29 inches; sand

2C—29 to 80 inches; sand

Keweenaw

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 4 inches; loamy sand

Bhs—4 to 6 inches; loamy fine sand

Bs—6 to 25 inches; loamy fine sand

E/B—25 to 45 inches; stratified sand to fine sand to loamy fine sand to loamy very fine sand

B/E—45 to 56 inches; stratified loamy fine sand to fine sand to fine sandy loam
E/B'—56 to 71 inches; stratified loamy fine sand to fine sand to fine sandy loam
B/E'—71 to 90 inches; stratified loamy fine sand to fine sandy loam

Sarona

A—0 to 3 inches; sandy loam
E—3 to 6 inches; fine sandy loam
Bs1—6 to 14 inches; fine sandy loam
Bs2—14 to 21 inches; fine sandy loam
Bs3—21 to 28 inches; sandy loam
B/E—28 to 47 inches; loamy sand
BC—47 to 75 inches; loamy sand
Cd—75 to 90 inches; loamy sand

Soil Properties and Qualities

Parent material: Karlin and Keweenaw—sandy glaciofluvial deposits; Sarona—coarse-loamy till
Slope: 6 to 25 percent
Hazard of soil blowing: Moderate
Surface runoff class: Karlin—low; Keweenaw and Sarona—medium
Potential for frost action: Low
Depth to restrictive feature: Karlin and Keweenaw—more than 80 inches; Sarona—75 inches to dense material
Drainage class: Karlin—somewhat excessively drained; Keweenaw and Sarona—well drained
Available water capacity: Karlin and Keweenaw—3.7 to 5.8 inches (low); Sarona—8.3 inches (moderate)
Shrink-swell potential: Karlin and Keweenaw—low; Sarona—moderate
Permeability: Karlin—moderately rapid; Keweenaw—moderately slow; Sarona—moderate
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 6e
Michigan soil management group: Karlin—4a; Keweenaw—4a-a; Sarona—3a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

**44D—Karlin-Keweenaw-Sarona, dense substratum,
complex, 25 to 50 percent slopes**

Setting

Landform: Outwash plains

Average Map Unit Composition

36 percent Karlin and similar soils
30 percent Keweenaw and similar soils

Soil Survey of Gogebic County, Michigan

25 percent Sarona and similar soils
9 percent components of minor extent

Typical Profile

Karlin

Oa—0 to 1 inch; highly decomposed plant material
E—1 to 4 inches; loamy fine sand
Bs—4 to 15 inches; sandy loam
2BC—15 to 29 inches; sand
2C—29 to 80 inches; sand

Keweenaw

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 4 inches; loamy sand
Bhs—4 to 6 inches; loamy fine sand
Bs—6 to 25 inches; loamy fine sand
E/B—25 to 45 inches; stratified sand to fine sand to loamy fine sand to loamy very fine sand
B/E—45 to 56 inches; stratified loamy fine sand to fine sand to fine sandy loam
E/B'—56 to 71 inches; stratified loamy fine sand to fine sand to fine sandy loam
B/E'—71 to 90 inches; stratified loamy fine sand to fine sandy loam

Sarona

A—0 to 3 inches; sandy loam
E—3 to 6 inches; fine sandy loam
Bs1—6 to 14 inches; fine sandy loam
Bs2—14 to 21 inches; fine sandy loam
Bs3—21 to 28 inches; sandy loam
B/E—28 to 47 inches; loamy sand
BC—47 to 75 inches; loamy sand
Cd—75 to 90 inches; loamy sand

Soil Properties and Qualities

Parent material: Karlin and Keweenaw—sandy glaciofluvial deposits; Sarona—coarse-loamy till

Slope: 25 to 50 percent

Hazard of soil blowing: Moderate

Surface runoff class: Karlin—medium; Keweenaw and Sarona—high

Potential for frost action: Low

Depth to restrictive feature: Karlin and Keweenaw—more than 80 inches; Sarona—75 inches to dense material

Drainage class: Karlin—somewhat excessively drained; Keweenaw and Sarona—well drained

Available water capacity: Karlin and Keweenaw—3.7 to 5.8 inches (low); Sarona—8.3 inches (moderate)

Shrink-swell potential: Karlin and Keweenaw—low; Sarona—moderate

Permeability: Karlin—moderately rapid; Keweenaw—moderately slow; Sarona—moderate

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: Karlin—4a; Keweenaw—4a-a; Sarona—3a

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

46C—Amasa-Karlin complex, esker, 2 to 18 percent slopes

Setting

Landform: Eskers

Average Map Unit Composition

54 percent Amasa and similar soils

40 percent Karlin and similar soils

6 percent components of minor extent

Typical Profile

Amasa

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 4 inches; cobbly silt loam

Bhs—4 to 7 inches; silt loam

Bs1—7 to 23 inches; very fine sandy loam

Bs2—23 to 28 inches; fine sandy loam

2C1—28 to 41 inches; sand

2C2—41 to 80 inches; very gravelly sand

Karlin

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 4 inches; loamy fine sand

Bs—4 to 15 inches; sandy loam

2BC—15 to 29 inches; sand

2C—29 to 80 inches; sand

Soil Properties and Qualities

Parent material: Amasa—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits; Karlin—sandy glaciofluvial deposits

Slope: 2 to 18 percent

Hazard of soil blowing: Amasa—slight; Karlin—moderate

Surface runoff class: Amasa—medium; Karlin—low

Potential for frost action: Amasa—moderate; Karlin—low

Depth to restrictive feature: More than 80 inches

Drainage class: Amasa—well drained; Karlin—somewhat excessively drained

Available water capacity: Amasa—6.3 inches (moderate); Karlin—5.8 inches (low)

Shrink-swell potential: Low

Permeability: Amasa—moderate; Karlin—moderately rapid

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 4e

Michigan soil management group: Amasa—3/5a-a; Karlin—4a

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

46D—Amasa-Karlin complex, esker, 18 to 35 percent slopes

Setting

Landform: Eskers

Average Map Unit Composition

52 percent Amasa and similar soils

38 percent Karlin and similar soils

10 percent components of minor extent

Typical Profile

Amasa

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 4 inches; cobbly silt loam

Bhs—4 to 7 inches; silt loam

Bs1—7 to 23 inches; very fine sandy loam

Bs2—23 to 28 inches; fine sandy loam

2C1—28 to 41 inches; sand

2C2—41 to 80 inches; very gravelly sand

Karlin

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 4 inches; loamy fine sand

Bs—4 to 15 inches; sandy loam

2BC—15 to 29 inches; sand

2C—29 to 80 inches; sand

Soil Properties and Qualities

Parent material: Amasa—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits; Karlin—sandy glaciofluvial deposits

Slope: 18 to 35 percent

Hazard of soil blowing: Amasa—slight; Karlin—moderate

Surface runoff class: Amasa—high; Karlin—medium

Potential for frost action: Amasa—moderate; Karlin—low

Depth to restrictive feature: More than 80 inches

Drainage class: Amasa—well drained; Karlin—somewhat excessively drained

Available water capacity: Amasa—6.3 inches (moderate); Karlin—5.8 inches (low)

Shrink-swell potential: Low

Permeability: Amasa—moderate; Karlin—moderately rapid

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: Amasa—3/5a-a; Karlin—4a

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

46E—Amasa-Karlin complex, esker, 35 to 55 percent slopes

Setting

Landform: Eskers

Average Map Unit Composition

52 percent Amasa and similar soils

38 percent Karlin and similar soils

10 percent components of minor extent

Typical Profile

Amasa

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 4 inches; cobbly silt loam

Bhs—4 to 7 inches; silt loam

Bs1—7 to 23 inches; very fine sandy loam

Bs2—23 to 28 inches; fine sandy loam

2C1—28 to 41 inches; sand

2C2—41 to 80 inches; very gravelly sand

Karlin

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 4 inches; loamy fine sand

Bs—4 to 15 inches; sandy loam

2BC—15 to 29 inches; sand

2C—29 to 80 inches; sand

Soil Properties and Qualities

Parent material: Amasa—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits; Karlin—sandy glaciofluvial deposits

Slope: 35 to 55 percent

Hazard of soil blowing: Amasa—slight; Karlin—moderate

Surface runoff class: Amasa—high; Karlin—medium

Potential for frost action: Amasa—moderate; Karlin—low

Depth to restrictive feature: More than 80 inches

Drainage class: Amasa—well drained; Karlin—somewhat excessively drained

Available water capacity: Amasa—6.3 inches (moderate); Karlin—5.8 inches (low)

Shrink-swell potential: Low

Permeability: Amasa—moderate; Karlin—moderately rapid

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: Amasa—3/5a-a; Karlin—4a

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

46F—Amasa-Karlin complex, esker, 55 to 75 percent slopes

Setting

Landform: Eskers; kames

Average Map Unit Composition

53 percent Amasa and similar soils

37 percent Karlin and similar soils

10 percent components of minor extent

Typical Profile

Amasa

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 4 inches; cobbly fine sandy loam

Bhs—4 to 7 inches; silt loam

Bs1—7 to 23 inches; very fine sandy loam

Bs2—23 to 28 inches; fine sandy loam

2C1—28 to 41 inches; sand

2C2—41 to 80 inches; very gravelly sand

Karlin

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 4 inches; loamy fine sand

Bs—4 to 15 inches; sandy loam

2BC—15 to 29 inches; sand

2C—29 to 80 inches; sand

Soil Properties and Qualities

Parent material: Amasa—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits; Karlin—sandy glaciofluvial deposits

Slope: 55 to 75 percent

Hazard of soil blowing: Amasa—slight; Karlin—moderate

Surface runoff class: Amasa—high; Karlin—medium

Potential for frost action: Amasa—moderate; Karlin—low

Depth to restrictive feature: More than 80 inches

Drainage class: Amasa—well drained; Karlin—somewhat excessively drained

Available water capacity: Amasa—6.3 inches (moderate); Karlin—5.8 inches (low)

Shrink-swell potential: Low

Permeability: Amasa—moderate; Karlin—moderately rapid

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: Amasa—3/5a-a; Karlin—4a

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

47B—Karlin, very deep water table-Noseum-Gay complex, 0 to 6 percent slopes

Setting

Landform: Moraines; outwash plains

Average Map Unit Composition

41 percent Karlin and similar soils

35 percent Noseum and similar soils

16 percent Gay and similar soils

8 percent components of minor extent

Typical Profile

Karlin

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 4 inches; loamy fine sand

Bs—4 to 15 inches; sandy loam

2BC—15 to 29 inches; sand

2C—29 to 80 inches; sand

Noseum

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 4 inches; fine sandy loam

Bhs—4 to 6 inches; fine sandy loam

Bs1—6 to 14 inches; fine sandy loam

2Bs2—14 to 24 inches; loamy sand

2BC—24 to 37 inches; sand

2C1—37 to 63 inches; fine sand

2C2—63 to 80 inches; sand

Gay

Oa—0 to 4 inches; muck

A—4 to 7 inches; fine sandy loam

Eg—7 to 11 inches; sandy loam

Bw—11 to 16 inches; sandy loam

BC—16 to 30 inches; sandy loam

C—30 to 80 inches; sandy loam

Soil Properties and Qualities

Parent material: Karlin—sandy glaciofluvial deposits; Noseum—loamy outwash over sandy outwash; Gay—coarse-loamy till

Slope: Karlin—0 to 6 percent; Noseum—0 to 3 percent; Gay—0 to 2 percent

Hazard of soil blowing: Moderate

Surface runoff class: Karlin and Noseum—very low; Gay—negligible

Soil Survey of Gogebic County, Michigan

Potential for frost action: Karlin and Noseum—low; Gay—high

Depth to restrictive feature: More than 80 inches

Drainage class: Karlin—somewhat excessively drained; Noseum—moderately well drained; Gay—poorly drained

Available water capacity: Karlin—5.8 inches (low); Noseum and Gay—6.3 to 8.1 inches (moderate)

Shrink-swell potential: Low

Permeability: Karlin and Noseum—moderately rapid; Gay—moderate

Flooding: None

Depth to seasonal high water table: Karlin—7.9 to 15.0 feet (January, February, June); Noseum—2.0 to 6.7 feet (April, May); Gay—at the surface (January, February, March, April, May, October, November, December)

Depth and months of deepest ponding: Karlin and Noseum—none; Gay—0.3 foot (March, April, May, October, November)

Months in which ponding does not occur: Gay—January, February, June, July, August, September, December

Interpretive Groups

Land capability classification: 3s

Michigan soil management group: Karlin and Noseum—4a; Gay—3c

Habitat type: Karlin—ATD; Noseum—TMC-V; Gay—TMC

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

48C—Karlin-Michigamme complex, 2 to 18 percent slopes, rocky

Setting

Landform: Outwash plains

Average Map Unit Composition

75 percent Karlin and similar soils

20 percent Michigamme and similar soils

5 percent components of minor extent

Typical Profile

Karlin

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 4 inches; loamy fine sand

Bs—4 to 15 inches; sandy loam

2BC—15 to 29 inches; sand

2C—29 to 80 inches; sand

Michigamme

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 2 inches; cobbly silt loam

E—2 to 4 inches; cobbly silt loam

Bhs—4 to 7 inches; silt loam

Bs1—7 to 14 inches; silt loam

Bs2—14 to 20 inches; silt loam

Bs3—20 to 24 inches; very cobbly silt loam

2Bx—24 to 31 inches; very cobbly fine sandy loam

3R—31 inches; bedrock

Soil Properties and Qualities

Parent material: Karlin—sandy glaciofluvial deposits; Michigamme—silty or loamy material over loamy till

Slope: 2 to 18 percent

Hazard of soil blowing: Moderate

Surface runoff class: Karlin—low; Michigamme—medium

Potential for frost action: Karlin—low; Michigamme—moderate

Depth to restrictive feature: Karlin—more than 80 inches; Michigamme—31 inches to lithic bedrock

Drainage class: Karlin—somewhat excessively drained; Michigamme—well drained

Available water capacity: 5.0 to 5.8 inches (low)

Shrink-swell potential: Karlin—low; Michigamme—moderate

Permeability: Karlin—moderately rapid; Michigamme—moderate

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 4e

Michigan soil management group: Karlin—4a; Michigamme—3/Ra

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

48F—Karlin-Michigamme complex, 25 to 75 percent slopes, very rocky

Setting

Landform: End moraines

Average Map Unit Composition

55 percent Karlin and similar soils

30 percent Michigamme and similar soils

15 percent components of minor extent

Typical Profile

Karlin

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 4 inches; loamy fine sand

Bs—4 to 15 inches; sandy loam

2BC—15 to 29 inches; sand

2C—29 to 80 inches; sand

Michigamme

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 2 inches; cobbly silt loam

E—2 to 4 inches; cobbly silt loam

Bhs—4 to 7 inches; silt loam

Bs1—7 to 14 inches; silt loam
Bs2—14 to 20 inches; silt loam
Bs3—20 to 24 inches; very cobbly silt loam
2Bx—24 to 31 inches; very cobbly fine sandy loam
3R—31 inches; bedrock

Soil Properties and Qualities

Parent material: Karlin—sandy till; Michigamme—silty or loamy material over loamy till
Slope: 25 to 75 percent
Hazard of soil blowing: Moderate
Surface runoff class: Karlin—medium; Michigamme—high
Potential for frost action: Karlin—low; Michigamme—moderate
Depth to restrictive feature: Karlin—more than 80 inches; Michigamme—31 inches to lithic bedrock
Drainage class: Karlin—somewhat excessively drained; Michigamme—well drained
Available water capacity: 5.0 to 5.8 inches (low)
Shrink-swell potential: Karlin—low; Michigamme—moderate
Permeability: Karlin—moderately rapid; Michigamme—moderate
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: Karlin—4a; Michigamme—3/Ra
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

49B—Pelissier-Sarwet complex, 1 to 6 percent slopes

Setting

Landform: Eskers on outwash plains

Average Map Unit Composition

52 percent Pelissier and similar soils
35 percent Sarwet and similar soils
13 percent components of minor extent

Typical Profile

Pelissier

Oa—0 to 2 inches; slightly decomposed plant material
E—2 to 6 inches; gravelly sandy loam
Bs1—6 to 10 inches; gravelly sandy loam
Bs2—10 to 21 inches; very gravelly loamy sand
C1—21 to 36 inches; very gravelly coarse sand
C2—36 to 80 inches; extremely gravelly coarse sand

Sarwet

Oi—0 to 2 inches; slightly decomposed plant material
Oa—2 to 3 inches; highly decomposed plant material

E—3 to 7 inches; fine sandy loam
Bhs—7 to 14 inches; fine sandy loam
Bs—14 to 22 inches; fine sandy loam
E/B—22 to 28 inches; loamy sand
B/E—28 to 38 inches; fine sandy loam
C1—38 to 47 inches; fine sand
2C2—47 to 50 inches; sandy clay loam
3C3—50 to 80 inches; loamy sand

Soil Properties and Qualities

Parent material: Pelissier—sandy and gravelly glaciofluvial deposits; Sarwet—coarse-loamy flow till
Slope: 1 to 6 percent
Hazard of soil blowing: Moderate
Surface runoff class: Pelissier—medium; Sarwet—low
Potential for frost action: Pelissier—low; Sarwet—moderate
Depth to restrictive feature: More than 80 inches
Drainage class: Pelissier—excessively drained; Sarwet—moderately well drained
Available water capacity: Pelissier—3.4 inches (low); Sarwet—8.2 inches (moderate)
Shrink-swell potential: Pelissier—low; Sarwet—moderate
Permeability: Pelissier—moderately rapid; Sarwet—moderate
Flooding: None
Depth to seasonal high water table: Pelissier—more than 6.5 feet; Sarwet—2 to 5 feet (April, May)
Ponding: None

Interpretive Groups

Land capability classification: 4s
Michigan soil management group: Pelissier—Ga; Sarwet—3a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

49C—Pelissier-Sarwet complex, 6 to 25 percent slopes

Setting

Landform: Eskers on outwash plains

Average Map Unit Composition

50 percent Pelissier and similar soils
35 percent Sarwet and similar soils
15 percent components of minor extent

Typical Profile

Pelissier

Oa—0 to 2 inches; slightly decomposed plant material
E—2 to 6 inches; gravelly sandy loam
Bs1—6 to 10 inches; gravelly sandy loam
Bs2—10 to 21 inches; very gravelly loamy sand
C1—21 to 36 inches; very gravelly coarse sand
C2—36 to 80 inches; extremely gravelly coarse sand

Sarwet

Oi—0 to 2 inches; slightly decomposed plant material

Oa—2 to 3 inches; highly decomposed plant material

E—3 to 7 inches; fine sandy loam

Bhs—7 to 14 inches; fine sandy loam

Bs—14 to 22 inches; fine sandy loam

E/B—22 to 28 inches; loamy sand

B/E—28 to 38 inches; fine sandy loam

C1—38 to 47 inches; fine sand

2C2—47 to 50 inches; sandy clay loam

3C3—50 to 80 inches; loamy sand

Soil Properties and Qualities

Parent material: Pelissier—sandy and gravelly glaciofluvial deposits; Sarwet—coarse-loamy flow till

Slope: 6 to 25 percent

Hazard of soil blowing: Moderate

Surface runoff class: Medium

Potential for frost action: Pelissier—low; Sarwet—moderate

Depth to restrictive feature: More than 80 inches

Drainage class: Pelissier—excessively drained; Sarwet—moderately well drained

Available water capacity: Pelissier—3.4 inches (low); Sarwet—8.2 inches (moderate)

Shrink-swell potential: Pelissier—low; Sarwet—moderate

Permeability: Pelissier—moderately rapid; Sarwet—moderate

Flooding: None

Depth to seasonal high water table: Pelissier—more than 6.5 feet; Sarwet—2 to 5 feet (April, May)

Ponding: None

Interpretive Groups

Land capability classification: 6s

Michigan soil management group: Pelissier—Ga; Sarwet—3a

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

49D—Pelissier gravelly sandy loam, 25 to 50 percent slopes

Setting

Landform: Eskers

Average Map Unit Composition

85 percent Pelissier and similar soils

15 percent components of minor extent

Typical Profile

Pelissier

Oa—0 to 2 inches; slightly decomposed plant material

E—2 to 6 inches; gravelly sandy loam

Bs1—6 to 10 inches; gravelly sandy loam

Bs2—10 to 21 inches; very gravelly loamy sand
C1—21 to 36 inches; very gravelly coarse sand
C2—36 to 80 inches; extremely gravelly coarse sand

Soil Properties and Qualities

Parent material: Loamy outwash over sandy and gravelly outwash
Slope: 25 to 50 percent
Hazard of soil blowing: Moderate
Surface runoff class: Medium
Potential for frost action: Low
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Available water capacity: 3.4 inches (low)
Shrink-swell potential: Low
Permeability: Moderately rapid
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7s
Michigan soil management group: Ga
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

52B—Pence-Vilas complex, 1 to 6 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

56 percent Pence and similar soils
35 percent Vilas and similar soils
9 percent components of minor extent

Typical Profile

Pence

Oe—0 to 2 inches; moderately decomposed plant material
E—2 to 6 inches; fine sandy loam
Bs1—6 to 9 inches; fine sandy loam
Bs2—9 to 13 inches; fine sandy loam
2Bs3—13 to 16 inches; coarse sand
2BC—16 to 31 inches; coarse sand
2C—31 to 80 inches; gravelly coarse sand, sand

Vilas

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 4 inches; loamy sand
Bs1—4 to 7 inches; loamy sand
Bs2—7 to 17 inches; loamy sand
Bs3—17 to 22 inches; coarse sand

BC—22 to 35 inches; sand
C—35 to 80 inches; coarse sand

Soil Properties and Qualities

Parent material: Pence—loamy eolian deposits over stratified sandy outwash; Vilas—sandy outwash
Slope: 1 to 6 percent
Hazard of soil blowing: Moderate
Surface runoff class: Pence—very low; Vilas—negligible
Potential for frost action: Low
Depth to restrictive feature: More than 80 inches
Drainage class: Pence—somewhat excessively drained; Vilas—excessively drained
Available water capacity: 4.1 to 4.2 inches (low)
Shrink-swell potential: Moderate
Permeability: Pence—moderately rapid; Vilas—rapid
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 3s
Michigan soil management group: 4a
Habitat type: AQV

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

52C—Pence-Vilas complex, 6 to 18 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

56 percent Pence and similar soils
35 percent Vilas and similar soils
9 percent components of minor extent

Typical Profile

Pence

Oe—0 to 2 inches; moderately decomposed plant material
E—2 to 6 inches; fine sandy loam
Bs1—6 to 9 inches; fine sandy loam
Bs2—9 to 13 inches; fine sandy loam
2Bs3—13 to 16 inches; coarse sand
2BC—16 to 31 inches; coarse sand
2C—31 to 80 inches; gravelly coarse sand, sand

Vilas

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 4 inches; loamy sand
Bs1—4 to 7 inches; loamy sand
Bs2—7 to 17 inches; loamy sand
Bs3—17 to 22 inches; coarse sand

BC—22 to 35 inches; sand
C—35 to 80 inches; coarse sand

Soil Properties and Qualities

Parent material: Pence—loamy eolian deposits over stratified sandy outwash; Vilas—sandy outwash
Slope: 6 to 18 percent
Hazard of soil blowing: Moderate
Surface runoff class: Very low
Potential for frost action: Low
Depth to restrictive feature: More than 80 inches
Drainage class: Pence—somewhat excessively drained; Vilas—excessively drained
Available water capacity: 4.1 to 4.2 inches (low)
Shrink-swell potential: Moderate
Permeability: Pence—moderately rapid; Vilas—rapid
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 4e
Michigan soil management group: 4a
Habitat type: AQV

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

53B—Manitowish-Croswell complex, 1 to 6 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

77 percent Manitowish and similar soils
22 percent Croswell and similar soils
1 percent components of minor extent

Typical Profile

Manitowish

Oi—0 to 1 inch; slightly decomposed plant material
Oa—1 to 2 inches; highly decomposed plant material
E—2 to 4 inches; sandy loam
Bhs—4 to 5 inches; sandy loam
Bs—5 to 11 inches; sandy loam
Bw—11 to 22 inches; sandy loam
2BC—22 to 40 inches; gravelly loamy sand
2C—40 to 80 inches; gravelly sand

Croswell

A—0 to 3 inches; sand
E—3 to 7 inches; sand

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Bs—7 to 34 inches; sand
C—34 to 80 inches; sand

Soil Properties and Qualities

Parent material: Manitowish—loamy eolian deposits over sandy outwash; Croswell—sandy drift
Slope: Manitowish—1 to 3 percent; Croswell—1 to 6 percent
Hazard of soil blowing: Manitowish—moderate; Croswell—severe
Surface runoff class: Manitowish—low; Croswell—negligible
Potential for frost action: Low
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Available water capacity: 4.0 to 5.9 inches (low)
Shrink-swell potential: Manitowish—moderate; Croswell—low
Permeability: Manitowish—moderate; Croswell—rapid
Flooding: None
Depth to seasonal high water table: 2.0 to 6.7 feet (April, May)
Ponding: None

Interpretive Groups

Land capability classification: 2e
Michigan soil management group: Manitowish—4a; Croswell—5a
Habitat type: TMV

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

57B—Karlin-Manitowish complex, 1 to 6 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

70 percent Karlin and similar soils
20 percent Manitowish and similar soils
10 percent components of minor extent

Typical Profile

Karlin

Oe—0 to 1 inch; moderately decomposed plant material
E—1 to 4 inches; loamy fine sand
Bs—4 to 15 inches; sandy loam
2BC—15 to 29 inches; sand
2C—29 to 80 inches; sand

Manitowish

Oi—0 to 1 inch; slightly decomposed plant material
Oa—1 to 2 inches; highly decomposed plant material
E—2 to 4 inches; sandy loam
Bhs—4 to 5 inches; sandy loam
Bs—5 to 10 inches; sandy loam
Bw—10 to 20 inches; sandy loam

2BC—20 to 40 inches; gravelly loamy sand
2C—40 to 80 inches; gravelly sand

Soil Properties and Qualities

Parent material: Karlin—sandy glaciofluvial deposits; Manitowish—loamy eolian deposits over sandy outwash
Slope: 1 to 6 percent
Hazard of soil blowing: Moderate
Surface runoff class: Low
Potential for frost action: Low
Depth to restrictive feature: More than 80 inches
Drainage class: Karlin—somewhat excessively drained; Manitowish—moderately well drained
Available water capacity: 5.8 inches (low)
Shrink-swell potential: Karlin—low; Manitowish—moderate
Permeability: Karlin—moderately rapid; Manitowish—moderate
Flooding: None
Depth to seasonal high water table: Karlin—more than 6.5 feet; Manitowish—2.0 to 6.7 feet (April, May)
Ponding: None

Interpretive Groups

Land capability classification: 3s
Michigan soil management group: 4a
Habitat type: TMV

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

57C—Karlin-Manitowish complex, 6 to 18 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

75 percent Karlin and similar soils
16 percent Manitowish and similar soils
9 percent components of minor extent

Typical Profile

Karlin

Oe—0 to 1 inch; moderately decomposed plant material
E—1 to 4 inches; loamy fine sand
Bs—4 to 15 inches; sandy loam
2BC—15 to 29 inches; sand
2C—29 to 80 inches; sand

Manitowish

Oi—0 to 1 inch; slightly decomposed plant material
Oa—1 to 2 inches; highly decomposed plant material
E—2 to 4 inches; sandy loam
Bhs—4 to 5 inches; sandy loam
Bs—5 to 10 inches; sandy loam

Bw—10 to 20 inches; sandy loam
2BC—20 to 40 inches; gravelly loamy sand
2C—40 to 80 inches; gravelly sand

Soil Properties and Qualities

Parent material: Karlin—sandy glaciofluvial deposits; Manitowish—loamy eolian deposits over sandy outwash
Slope: 6 to 18 percent
Hazard of soil blowing: Moderate
Surface runoff class: Low
Potential for frost action: Low
Depth to restrictive feature: More than 80 inches
Drainage class: Karlin—somewhat excessively drained; Manitowish—moderately well drained
Available water capacity: 5.8 inches (low)
Shrink-swell potential: Karlin—low; Manitowish—moderate
Permeability: Karlin—moderately rapid; Manitowish—moderate
Flooding: None
Depth to seasonal high water table: Karlin—more than 6.5 feet; Manitowish—2.0 to 6.7 feet (April, May)
Ponding: None

Interpretive Groups

Land capability classification: 4e
Michigan soil management group: 4a
Habitat type: TMV

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

58B—Vilas, very deep water table-Croswell-Pence, very deep water table, complex, 1 to 6 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

40 percent Vilas and similar soils
22 percent Croswell and similar soils
20 percent Pence and similar soils
18 percent components of minor extent

Typical Profile

Vilas

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 4 inches; loamy sand
Bs1—4 to 7 inches; loamy sand
Bs2—7 to 17 inches; loamy sand
Bs3—17 to 22 inches; coarse sand
BC—22 to 35 inches; sand
C—35 to 80 inches; coarse sand

Croswell

A—0 to 3 inches; sand

E—3 to 7 inches; sand

Bs—7 to 34 inches; sand

C—34 to 80 inches; sand

Pence

Oe—0 to 2 inches; moderately decomposed plant material

E—2 to 6 inches; fine sandy loam

Bs1—6 to 9 inches; fine sandy loam

Bs2—9 to 13 inches; fine sandy loam

2Bs3—13 to 16 inches; coarse sand

2BC—16 to 31 inches; coarse sand

2C—31 to 80 inches; gravelly coarse sand, sand

Soil Properties and Qualities

Parent material: Vilas—sandy outwash; Croswell—sandy drift; Pence—loamy eolian deposits over stratified sandy outwash

Slope: Vilas and Pence—1 to 6 percent; Croswell—2 to 6 percent

Hazard of soil blowing: Vilas and Pence—moderate; Croswell—severe

Surface runoff class: Vilas and Croswell—negligible; Pence—low

Potential for frost action: Low

Depth to restrictive feature: More than 80 inches

Drainage class: Vilas—excessively drained; Croswell—moderately well drained; Pence—somewhat excessively drained

Available water capacity: 4.0 to 4.2 inches (low)

Shrink-swell potential: Vilas and Pence—moderate; Croswell—low

Permeability: Vilas and Croswell—rapid; Pence—moderately rapid

Flooding: None

Depth to seasonal high water table: Vilas—7.9 to 15.0 feet (January, February, June); Croswell—2.0 to 6.7 feet (April, May); Pence—more than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 4s

Michigan soil management group: Vilas—4a; Croswell—5a; Pence—4a

Habitat type: TMV

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

61—Tawas-Kinross complex, 0 to 2 percent slopes

Setting

Landform: Swamps on till plains

Average Map Unit Composition

60 percent Tawas and similar soils

30 percent Kinross and similar soils

10 percent components of minor extent

Typical Profile

Tawas

Oa—0 to 22 inches; muck
C1—22 to 42 inches; sand
C2—42 to 80 inches; gravelly sand

Kinross

Oa—0 to 5 inches; highly decomposed plant material
E—5 to 10 inches; loamy fine sand
Bhs—10 to 12 inches; fine sand
Bs—12 to 30 inches; fine sand
BC—30 to 41 inches; fine sand
C—41 to 80 inches; sand

Soil Properties and Qualities

Parent material: Tawas—highly decomposed organic material over sandy drift;
Kinross—sandy glaciofluvial deposits
Slope: Tawas—0 to 1 percent; Kinross—0 to 2 percent
Hazard of soil blowing: Tawas—moderate; Kinross—slight
Surface runoff class: Negligible
Potential for frost action: Tawas—high; Kinross—moderate
Depth to restrictive feature: More than 80 inches
Drainage class: Tawas—very poorly drained; Kinross—poorly drained
Available water capacity: Tawas—11.1 inches (high); Kinross—5.7 inches (low)
Shrink-swell potential: Low
Permeability: Rapid
Flooding: None
Depth to seasonal high water table: Tawas—at the surface (January, February, March, April, May, June, October, November, December); Kinross—at the surface (January, February, March, April, May, October, November, December)
Depth and months of deepest ponding: 0.2 foot (March, April, May, June, October, November)
Months in which ponding does not occur: January, February, July, August, September, December

Interpretive Groups

Land capability classification: 6w
Michigan soil management group: Tawas—M/4c; Kinross—5c-a
Habitat type: TTS

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

62B—Pelkie loamy very fine sand, 1 to 6 percent slopes

Setting

Landform: Flood plains

Average Map Unit Composition

100 percent Pelkie and similar soils

Typical Profile

Pelkie

Ap—0 to 8 inches; loamy very fine sand

C1—8 to 32 inches; fine sand

C2—32 to 80 inches; sand

Soil Properties and Qualities

Parent material: Sandy alluvium

Slope: 1 to 6 percent

Hazard of soil blowing: Moderate

Surface runoff class: Very low

Potential for frost action: Moderate

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Available water capacity: 4 inches (low)

Shrink-swell potential: Moderate

Permeability: Rapid

Frequency of flooding: Occasional (March, April, May)

Depth to seasonal high water table: 3.5 to 6.7 feet (April, May, November)

Ponding: None

Interpretive Groups

Land capability classification: 6s

Michigan soil management group: L-2c

Habitat type: AVO

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

83—Bowstring muck, 0 to 1 percent slopes, frequently flooded

Setting

Landform: Flood plains; outwash plains; moraines

Average Map Unit Composition

90 percent Bowstring and similar soils

10 percent components of minor extent

Typical Profile

Bowstring

Oa—0 to 13 inches; muck

C—13 to 15 inches; stratified muck to mucky silt loam

O'a—15 to 32 inches; muck

Oe—32 to 36 inches; mucky peat

C'1—36 to 42 inches; fine sandy loam

C'2—42 to 80 inches; stratified gravelly coarse sand to sand

Soil Properties and Qualities

Parent material: Stratified sandy and loamy material in highly decomposed organic material

Slope: 0 to 1 percent

Hazard of soil blowing: Moderate

Surface runoff class: Negligible

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Available water capacity: 15.6 inches (very high)

Shrink-swell potential: Moderate

Permeability: Moderately slow to rapid

Highest frequency of flooding: Frequent (March, April, May, June)

Depth to seasonal high water table: At the surface (January, February, March, April, May, October, November, December)

Ponding: None

Interpretive Groups

Land capability classification: 7w

Michigan soil management group: L-Mc

Habitat type: FMC-C

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

141D—Oldman very gravelly silt loam, 8 to 15 percent slopes, very stony

Setting

Landform: Till plains

Average Map Unit Composition

80 percent Oldman and similar soils

20 percent components of minor extent

Typical Profile

Oldman

Oe—0 to 1 inch; gravelly, moderately decomposed plant material

A—1 to 3 inches; very gravelly silt loam

Bhs—3 to 23 inches; extremely cobbly loam

B/Ex—23 to 28 inches; very gravelly fine sandy loam

Btx—28 to 43 inches; extremely bouldery fine sandy loam

Bx1—43 to 58 inches; extremely bouldery loamy fine sand

Bx2—58 to 80 inches; loamy fine sand

Soil Properties and Qualities

Parent material: Loamy till

Slope: 8 to 15 percent

Hazard of soil blowing: Slight

Surface runoff class: Medium

Potential for frost action: Moderate

Depth to restrictive feature: 23 inches to a fragipan

Drainage class: Moderately well drained

Available water capacity: 5.3 inches (low)

Shrink-swell potential: Moderate

Permeability: Very slow

Flooding: None

Depth to seasonal high water table: 1.0 to 2.5 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 6s

Michigan soil management group: Ga-f

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

141E—Oldman very gravelly silt loam, 15 to 35 percent slopes, very stony

Setting

Landform: Till plains

Average Map Unit Composition

80 percent Oldman and similar soils

20 percent components of minor extent

Typical Profile

Oldman

Oe—0 to 1 inch; gravelly, moderately decomposed plant material

A—1 to 3 inches; very gravelly silt loam

Bhs—3 to 23 inches; extremely cobbly loam

B/Ex—23 to 28 inches; very gravelly fine sandy loam

Btx—28 to 43 inches; extremely bouldery fine sandy loam

Bx1—43 to 58 inches; extremely bouldery loamy fine sand

Bx2—58 to 80 inches; loamy fine sand

Soil Properties and Qualities

Parent material: Loamy till

Slope: 15 to 35 percent

Hazard of soil blowing: Slight

Surface runoff class: High

Potential for frost action: Moderate

Depth to restrictive feature: 23 inches to a fragipan

Drainage class: Moderately well drained

Available water capacity: 5.3 inches (low)

Shrink-swell potential: Moderate

Permeability: Very slow

Flooding: None

Depth to seasonal high water table: 1.0 to 2.5 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: Ga-f

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

141F—Porkies very stony silt loam, 35 to 70 percent slopes, very stony

Setting

Landform: Till plains

Average Map Unit Composition

80 percent Porkies and similar soils

20 percent components of minor extent

Typical Profile

Porkies

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 3 inches; very stony silt loam

E—3 to 4 inches; very gravelly fine sandy loam

Bhs—4 to 7 inches; very gravelly fine sandy loam

Bs1—7 to 31 inches; very gravelly sandy loam

Bs2—31 to 40 inches; very bouldery sandy loam

Bt—40 to 50 inches; very bouldery sandy loam

Btx—50 to 61 inches; bouldery fine sandy loam

E/B—61 to 90 inches; extremely gravelly loamy coarse sand

Soil Properties and Qualities

Parent material: Loamy till

Slope: 35 to 70 percent

Hazard of soil blowing: Moderate

Surface runoff class: High

Potential for frost action: Moderate

Depth to restrictive feature: 50 inches to a fragipan

Drainage class: Well drained

Available water capacity: 5.4 inches (low)

Shrink-swell potential: Low

Permeability: Very slow

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7s

Michigan soil management group: Ga-f

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

214B—Amnicon-Bergland complex, 0 to 6 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

60 percent Amnicon and similar soils
30 percent Bergland and similar soils
10 percent components of minor extent

Typical Profile

Amnicon

A—0 to 2 inches; silt loam
E—2 to 5 inches; silty clay loam
E/B—5 to 10 inches; silty clay loam
B/E—10 to 16 inches; clay
Bt—16 to 24 inches; clay
Btk—24 to 43 inches; clay
C—43 to 80 inches; clay

Bergland

Oe—0 to 1 inch; mucky peat
A—1 to 3 inches; mucky clay
Eg—3 to 8 inches; clay
Bg—8 to 13 inches; clay
Bw—13 to 25 inches; clay
Bt1—25 to 35 inches; clay
Bt2—35 to 48 inches; clay
C—48 to 80 inches; silty clay

Soil Properties and Qualities

Parent material: Clayey till

Slope: Amnicon—2 to 6 percent; Bergland—0 to 1 percent

Hazard of soil blowing: Amnicon—slight; Bergland—moderate

Surface runoff class: Amnicon—very high; Bergland—negligible

Potential for frost action: Amnicon—moderate; Bergland—high

Depth to restrictive feature: More than 80 inches

Drainage class: Amnicon—moderately well drained; Bergland—poorly drained

Available water capacity: Amnicon—5.8 inches (low); Bergland—6.3 inches
(moderate)

Shrink-swell potential: Very high

Permeability: Very slow

Flooding: None

Depth to seasonal high water table: Amnicon—at the surface (April); Bergland—at the surface (March, April, May, October, November)

Depth and months of deepest ponding: Amnicon—none; Bergland—0.5 foot (March, April, May, October, November)

Months in which ponding does not occur: Bergland—January, February, June, July, August, September, December

Interpretive Groups

Land capability classification: 2e

Michigan soil management group: Amnicon—0a; Bergland—0c

Habitat type: Amnicon—TAM; Bergland—FMC

Major Uses

Dominant use: Cropland

Other uses: Hayland, forestland

216B—Amnicon silt loam, 2 to 8 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

85 percent Amnicon and similar soils

15 percent components of minor extent

Typical Profile

Amnicon

A—0 to 2 inches; silt loam

E—2 to 5 inches; silty clay loam

E/B—5 to 10 inches; silty clay loam

B/E—10 to 16 inches; clay

Bt—16 to 24 inches; clay

Btk—24 to 43 inches; clay

C—43 to 80 inches; clay

Soil Properties and Qualities

Parent material: Clayey till

Slope: 2 to 8 percent

Hazard of soil blowing: Slight

Surface runoff class: Very high

Potential for frost action: Moderate

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Available water capacity: 5.8 inches (low)

Shrink-swell potential: Very high

Permeability: Very slow

Flooding: None

Depth to seasonal high water table: At the surface (April)

Ponding: None

Interpretive Groups

Land capability classification: 2e

Michigan soil management group: 0a

Habitat type: TAM

Major Uses

Dominant use: Cropland

Other uses: Pasture, forestland

217A—Cuttre silt loam, 0 to 3 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

85 percent Cuttre and similar soils

15 percent components of minor extent

Typical Profile

Cuttre

A—0 to 3 inches; silt loam

E/B—3 to 6 inches; clay loam

B/E—6 to 12 inches; clay

Bt—12 to 25 inches; clay

Btk—25 to 41 inches; clay

BC—41 to 80 inches; clay

Soil Properties and Qualities

Parent material: Clayey till

Slope: 0 to 3 percent

Hazard of soil blowing: Moderate

Surface runoff class: Very high

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained

Available water capacity: 5.8 inches (low)

Shrink-swell potential: Very high

Permeability: Very slow

Flooding: None

Depth to seasonal high water table: 6 inches (April, May)

Ponding: None

Interpretive Groups

Land capability classification: 3w

Michigan soil management group: 0b

Habitat type: TTP

Major Uses

Dominant use: Cropland

Other uses: Pasture, forestland

218—Bergland mucky clay, 0 to 1 percent slopes

Setting

Landform: Depressions on till plains

Average Map Unit Composition

80 percent Bergland and similar soils

20 percent components of minor extent

Typical Profile

Bergland

Oe—0 to 1 inch; mucky peat
A—1 to 3 inches; mucky clay
Eg—3 to 8 inches; clay
Bg—8 to 13 inches; clay
Bw—13 to 25 inches; clay
Bt1—25 to 35 inches; clay
Bt2—35 to 48 inches; clay
C—48 to 80 inches; silty clay

Soil Properties and Qualities

Parent material: Clayey till
Slope: 0 to 1 percent
Hazard of soil blowing: Moderate
Surface runoff class: Negligible
Potential for frost action: High
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Available water capacity: 6.3 inches (moderate)
Shrink-swell potential: Very high
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: At the surface (March, April, May, October, November)
Months in which ponding does not occur: January, February, June, July, August, September, December
Depth and months of deepest ponding: 0.5 foot (March, April, May, October, November)

Interpretive Groups

Land capability classification: 5w
Michigan soil management group: 0c
Habitat type: FE

Major Uses

Dominant use: Forestland
Other uses: Hayland, recreation

219B—Payseor-Froberg complex, 0 to 4 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

50 percent Payseor and similar soils
40 percent Froberg and similar soils
10 percent components of minor extent

Typical Profile

Payseor

Ap—0 to 7 inches; clay
A—7 to 10 inches; clay

Bt1—10 to 18 inches; clay
Bt2—18 to 25 inches; clay
2Bt3—25 to 37 inches; sandy loam
2Bt4—37 to 45 inches; sandy loam
2C—45 to 80 inches; sand

Froberg

Ap—0 to 4 inches; clay
B/E—4 to 8 inches; clay
Bt—8 to 22 inches; clay
BC1—22 to 32 inches; clay
2BC2—32 to 45 inches; sandy clay loam
2BC3—45 to 80 inches; sandy clay loam

Soil Properties and Qualities

Parent material: Clayey till over loamy till
Slope: Payseor—0 to 3 percent; Froberg—1 to 4 percent
Hazard of soil blowing: Payseor—moderate; Froberg—slight
Surface runoff class: Very high
Potential for frost action: Payseor—high; Froberg—moderate
Depth to restrictive feature: More than 80 inches
Drainage class: Payseor—somewhat poorly drained; Froberg—moderately well drained
Available water capacity: 7.1 inches (moderate)
Shrink-swell potential: Very high
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: Payseor—at the surface (April); Froberg—1.5 to 2.5 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 3w
Michigan soil management group: Payseor—0b; Froberg—1a
Habitat type: Payseor—TTP; Froberg—TAM

Major Uses

Dominant use: Cropland
Other uses: Hayland, forestland

**222—Matchwood mucky clay, 0 to 2 percent slopes,
frequently ponded**

Setting

Landform: Depressions on till plains

Average Map Unit Composition

85 percent Matchwood and similar soils
15 percent components of minor extent

Typical Profile

Matchwood

Oa—0 to 1 inch; highly decomposed plant material

A—1 to 4 inches; mucky clay
Bg—4 to 10 inches; clay
Bt—10 to 29 inches; clay
2BC—29 to 50 inches; clay
2Cd—50 to 80 inches; silty clay loam

Soil Properties and Qualities

Parent material: Clayey till over loamy till
Slope: 0 to 2 percent
Hazard of soil blowing: Slight
Surface runoff class: Negligible
Potential for frost action: High
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Available water capacity: 9.3 inches (high)
Shrink-swell potential: High
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: At the surface (January, February, March, April, May, October, November, December)
Depth and months of deepest ponding: 0.5 foot (March, April, May, October, November)
Months in which ponding does not occur: January, February, June, July, August, September, December

Interpretive Groups

Land capability classification: 5w
Michigan soil management group: 1c
Habitat type: FE

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

225A—Cuttre-Bergland complex, 0 to 3 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

50 percent Cuttre and similar soils
40 percent Bergland and similar soils
10 percent components of minor extent

Typical Profile

Cuttre

A—0 to 3 inches; clay
E/B—3 to 6 inches; clay loam
B/E—6 to 12 inches; clay
Bt—12 to 25 inches; clay
Btk—25 to 41 inches; clay
BC—41 to 80 inches; clay

Bergland

Oe—0 to 1 inch; mucky peat
A—1 to 3 inches; mucky clay
Eg—3 to 8 inches; clay
Bg—8 to 13 inches; clay
Bw—13 to 25 inches; clay
Bt1—25 to 35 inches; clay
Bt2—35 to 48 inches; clay
C—48 to 80 inches; silty clay

Soil Properties and Qualities

Parent material: Clayey till

Slope: Cuttre—0 to 3 percent; Bergland—0 to 1 percent

Hazard of soil blowing: Moderate

Surface runoff class: Cuttre—very high; Bergland—negligible

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Cuttre—somewhat poorly drained; Bergland—poorly drained

Available water capacity: Cuttre—5.8 inches (low); Bergland—6.3 inches (moderate)

Shrink-swell potential: Very high

Permeability: Very slow

Flooding: None

Depth to seasonal high water table: Cuttre—6 inches (April, May); Bergland—at the surface (March, April, May, October, November)

Depth and months of deepest ponding: Cuttre—none; Bergland—0.5 foot (March, April, May, October, November)

Months in which ponding does not occur: Bergland—January, February, June, July, August, September, December

Interpretive Groups

Land capability classification: 3w

Michigan soil management group: Cuttre—0b; Bergland—0c

Habitat type: Cuttre—TTP; Bergland—FE

Major Uses

Dominant use: Forestland

Other uses: Hayland, wildlife habitat

226B—Froberg clay, 1 to 6 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

85 percent Froberg and similar soils

15 percent components of minor extent

Typical Profile

Froberg

Ap—0 to 4 inches; clay
B/E—4 to 8 inches; clay
Bt—8 to 22 inches; clay
BC1—22 to 32 inches; clay

2BC2—32 to 45 inches; sandy clay loam

2BC3—45 to 80 inches; sandy clay loam

Soil Properties and Qualities

Parent material: Clayey till over loamy till

Slope: 1 to 6 percent

Hazard of soil blowing: Slight

Surface runoff class: Very high

Potential for frost action: Moderate

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Available water capacity: 7.1 inches (moderate)

Shrink-swell potential: Very high

Permeability: Very slow

Flooding: None

Depth to seasonal high water table: 1.5 to 2.5 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 3e

Michigan soil management group: 1a

Habitat type: TAM

Major Uses

Dominant use: Forestland

Other use: Cropland

230B—Moquah-Arnheim complex, 0 to 3 percent slopes, frequently flooded

Setting

Landform: Flood plains

Average Map Unit Composition

55 percent Moquah and similar soils

30 percent Arnheim and similar soils

15 percent components of minor extent

Typical Profile

Moquah

A—0 to 5 inches; fine sandy loam

C1—5 to 19 inches; stratified loamy fine sand to loamy very fine sand to silt loam

C2—19 to 48 inches; stratified fine sand to very fine sandy loam to silt loam

C3—48 to 55 inches; stratified sand to fine sand to loamy very fine sand to very fine sandy loam

C4—55 to 80 inches; stratified sand to fine sand to loamy fine sand to silt loam

Arnheim

A—0 to 5 inches; mucky silt loam

Cg—5 to 10 inches; silt loam

C—10 to 80 inches; stratified very fine sandy loam to silt loam to loamy fine sand to fine sandy loam

Soil Properties and Qualities

Parent material: Moquah—coarse-loamy alluvium; Arnheim—loamy alluvium
Slope: Moquah—0 to 3 percent; Arnheim—0 to 1 percent
Hazard of soil blowing: Moquah—moderate; Arnheim—slight
Surface runoff class: Moquah—low; Arnheim—negligible
Potential for frost action: Moquah—moderate; Arnheim—high
Depth to restrictive feature: More than 80 inches
Drainage class: Moquah—moderately well drained; Arnheim—poorly drained
Available water capacity: 10.3 to 11.3 inches (high)
Shrink-swell potential: Low
Permeability: Moderate
Highest frequency of flooding: Moquah—frequent (April, May); Arnheim—frequent (March, April, May, June)
Depth to seasonal high water table: Moquah—3.5 to 6.7 feet (April, May, November); Arnheim—at the surface (January, February, March, April, May, October, November, December)
Depth and months of deepest ponding: Moquah—none; Arnheim—0.2 foot (June, July, August, September, October, November)
Months in which ponding does not occur: Arnheim—January, February, March, April, May, December

Interpretive Groups

Land capability classification: 5w
Michigan soil management group: Moquah—L-2a; Arnheim—L-2c
Habitat type: Moquah—AOC; Arnheim—FMC

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

231—Matchwood-Dorval complex, 0 to 1 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

45 percent Matchwood and similar soils
35 percent Dorval and similar soils
20 percent components of minor extent

Typical Profile

Matchwood

Oa—0 to 1 inch; highly decomposed plant material
A—1 to 4 inches; mucky clay
Bg—4 to 10 inches; clay
Bt—10 to 29 inches; clay
2BC—29 to 50 inches; clay
2Cd—50 to 80 inches; silty clay loam

Dorval

Oa1—0 to 4 inches; muck
Oa2—4 to 14 inches; muck
Oa3—14 to 32 inches; muck

2C1—32 to 44 inches; silty clay loam
2C2—44 to 50 inches; stratified silt loam to silty clay loam
2C3—50 to 80 inches; gravelly sandy loam

Soil Properties and Qualities

Parent material: Matchwood—sandy outwash over clayey till over loamy till; Dorval—highly decomposed organic material over clayey alluvium and/or till
Slope: 0 to 1 percent
Hazard of soil blowing: Slight
Surface runoff class: Negligible
Potential for frost action: Matchwood—high; Dorval—low
Depth to restrictive feature: More than 80 inches
Drainage class: Matchwood—poorly drained; Dorval—very poorly drained
Available water capacity: Matchwood—9 inches (moderate); Dorval—17 inches (very high)
Shrink-swell potential: High
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: Matchwood—at the surface (January, February, March, April, May, October, November, December); Dorval—at the surface (January, February, March, April, May, June, October, November, December)
Depth and months of deepest ponding: Matchwood—0.5 foot (March, April, May, October, November); Dorval—0.2 foot (March, April, May, June, October, November)
Months in which ponding does not occur: Matchwood—January, February, June, July, August, September, December; Dorval—January, February, July, August, September, December

Interpretive Groups

Land capability classification: 5w
Michigan soil management group: Matchwood—1c; Dorval—M/1c
Habitat type: Matchwood—TMC; Dorval—TTS

Major Uses

Dominant use: Forestland
Other uses: Wildlife habitat, recreation

233—Schaat Creek silt loam, 0 to 1 percent slopes, frequently flooded

Setting

Landform: Flood plains on till plains

Average Map Unit Composition

90 percent Schaat Creek and similar soils
10 percent components of minor extent

Typical Profile

Schaat Creek

Ap—0 to 5 inches; silt loam
Bw—5 to 10 inches; silt loam
Bt1—10 to 19 inches; silty clay loam
Bt2—19 to 43 inches; silty clay loam

BCg—43 to 54 inches; clay loam

C—54 to 80 inches; silt loam

Soil Properties and Qualities

Parent material: Clayey alluvium

Slope: 0 to 1 percent

Hazard of soil blowing: Slight

Surface runoff class: Negligible

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Available water capacity: 12.4 inches (very high)

Shrink-swell potential: High

Permeability: Very slow

Frequency of flooding: Frequent (March, April, May)

Depth to seasonal high water table: At the surface (January, February, March, April, May, November, December)

Ponding: None

Interpretive Groups

Land capability classification: 6w

Michigan soil management group: 1.5c

Habitat type: FMC-C

Major Uses

Dominant use: Forestland

Other uses: Hayland, recreation

239D—Miskoaki silt loam, 15 to 35 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

85 percent Miskoaki and similar soils

15 percent components of minor extent

Typical Profile

Miskoaki

A—0 to 4 inches; silt loam

E/B—4 to 10 inches; silt loam

Bt—10 to 25 inches; clay

Btk—25 to 53 inches; clay

BC—53 to 80 inches; clay

Soil Properties and Qualities

Parent material: Clayey till

Slope: 15 to 35 percent

Hazard of soil blowing: Moderate

Surface runoff class: Very high

Potential for frost action: Moderate

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Available water capacity: 6.8 inches (moderate)
Shrink-swell potential: Very high
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 4e
Michigan soil management group: 0a
Habitat type: TAM

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

277B—Kellogg, sandy substratum-Allendale complex, 0 to 4 percent slopes

Setting

Landform: Outwash plains on till plains

Average Map Unit Composition

50 percent Kellogg and similar soils
35 percent Allendale and similar soils
15 percent components of minor extent

Typical Profile

Kellogg

A—0 to 6 inches; loamy sand
E—6 to 9 inches; loamy sand
Bs—9 to 24 inches; sand
2B/E—24 to 31 inches; sandy clay loam
2Bt—31 to 37 inches; silty clay loam
2BC—37 to 59 inches; silty clay loam
3C—59 to 80 inches; sand

Allendale

Oe—0 to 1 inch; mucky peat
A—1 to 2 inches; loamy fine sand
E—2 to 6 inches; fine sandy loam
Bhs—6 to 15 inches; fine sand
Bs—15 to 23 inches; fine sand
E'—23 to 24 inches; fine sandy loam
2Bt1—24 to 35 inches; clay
2Bt2—35 to 80 inches; silty clay loam

Soil Properties and Qualities

Parent material: Kellogg—sandy outwash over clayey till over sandy till; Allendale—sandy glaciofluvial deposits over clayey till over sandy till
Slope: Kellogg—1 to 4 percent; Allendale—0 to 4 percent
Hazard of soil blowing: Moderate
Surface runoff class: Kellogg—very low; Allendale—negligible

Potential for frost action: Moderate

Depth to restrictive feature: More than 80 inches

Drainage class: Kellogg—moderately well drained; Allendale—somewhat poorly drained

Available water capacity: Kellogg—8.5 inches (moderate); Allendale—10.9 inches (high)

Shrink-swell potential: Kellogg—very high; Allendale—high

Permeability: Rapid over slow or very slow

Flooding: None

Depth to seasonal high water table: Kellogg—1.0 to 2.5 feet (April); Allendale—at the surface (April)

Ponding: None

Interpretive Groups

Land capability classification: 3s

Michigan soil management group: Kellogg—4/1a; Allendale—4/1b

Habitat type: Kellogg—ATD; Allendale—TMC-D

Major Uses

Dominant use: Cropland

Other uses: Hayland, forestland

280B—Flintsteel loam, 1 to 8 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

85 percent Flintsteel and similar soils

15 percent components of minor extent

Typical Profile

Flintsteel

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; loam

E—5 to 9 inches; loam

Bw—9 to 12 inches; fine sandy loam

E/B—12 to 16 inches; loam

B/E—16 to 22 inches; loam

Bt—22 to 36 inches; silt loam

BCd—36 to 48 inches; silt loam

Cd—48 to 80 inches; silt loam

Soil Properties and Qualities

Parent material: Fine-loamy till

Slope: 1 to 8 percent

Hazard of soil blowing: Slight

Surface runoff class: Low

Potential for frost action: Moderate

Depth to restrictive feature: 36 inches to dense material

Drainage class: Moderately well drained

Available water capacity: 8.6 inches (moderate)

Shrink-swell potential: Moderate

Permeability: Moderately slow

Flooding: None

Depth to seasonal high water table: 1.5 to 6.7 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 2e

Michigan soil management group: 2.5a

Habitat type: TAM

Major Uses

Dominant use: Forestland

Other uses: Cropland, pasture

280C—Flintsteel loam, 8 to 15 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

85 percent Flintsteel and similar soils

15 percent components of minor extent

Typical Profile

Flintsteel

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; loam

E—5 to 9 inches; loam

Bw—9 to 12 inches; fine sandy loam

E/B—12 to 16 inches; loam

B/E—16 to 22 inches; loam

Bt—22 to 36 inches; silt loam

BCd—36 to 48 inches; silt loam

Cd—48 to 80 inches; silt loam

Soil Properties and Qualities

Parent material: Fine-loamy till

Slope: 8 to 15 percent

Hazard of soil blowing: Slight

Surface runoff class: Medium

Potential for frost action: Moderate

Depth to restrictive feature: 36 inches to dense material

Drainage class: Moderately well drained

Available water capacity: 8.6 inches (moderate)

Shrink-swell potential: Moderate

Permeability: Moderately slow

Flooding: None

Depth to seasonal high water table: 1.5 to 6.7 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 3e

Michigan soil management group: 2.5a
Habitat type: TAM

Major Uses

Dominant use: Forestland
Other uses: Cropland, pasture

282B—Big Iron-Flintsteel complex, 0 to 4 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

70 percent Big Iron and similar soils
20 percent Flintsteel and similar soils
10 percent components of minor extent

Typical Profile

Big Iron

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 3 inches; silt loam
E—3 to 4 inches; silt loam
Bw—4 to 11 inches; loam
E/B—11 to 17 inches; loam
Bt—17 to 47 inches; silt loam
BCd1—47 to 66 inches; loam
BCd2—66 to 80 inches; silt loam

Flintsteel

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; fine sandy loam
E—5 to 9 inches; loam
Bw—9 to 12 inches; fine sandy loam
E/B—12 to 16 inches; loam
B/E—16 to 22 inches; loam
Bt—22 to 36 inches; silt loam
BCd—36 to 48 inches; silt loam
Cd—48 to 80 inches; silt loam

Soil Properties and Qualities

Parent material: Fine-loamy till
Slope: Big Iron—0 to 3 percent; Flintsteel—2 to 4 percent
Hazard of soil blowing: Slight
Surface runoff class: Low
Potential for frost action: Big Iron—high; Flintsteel—moderate
Depth to restrictive feature: Big Iron—47 inches to dense material; Flintsteel—36 inches to dense material
Drainage class: Big Iron—somewhat poorly drained; Flintsteel—moderately well drained
Available water capacity: Big Iron—9.7 inches (high); Flintsteel—8.6 inches (moderate)
Shrink-swell potential: Moderate
Permeability: Big Iron—slow; Flintsteel—moderately slow

Flooding: None

Depth to seasonal high water table: Big Iron—0.5 foot to 2.5 feet (April, May);
Flintsteel—1.5 to 6.3 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 2w

Michigan soil management group: Big Iron—1.5b; Flintsteel—2.5a

Habitat type: Big Iron—TTP; Flintsteel—TAM

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

283B—Loggerhead-Noseum-Ubly complex, 1 to 6 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

40 percent Loggerhead and similar soils

30 percent Noseum and similar soils

20 percent Ubly and similar soils

10 percent components of minor extent

Typical Profile

Loggerhead

A—0 to 4 inches; loam

E—4 to 5 inches; gravelly fine sandy loam

Bs—5 to 15 inches; gravelly loam

E/B—15 to 38 inches; gravelly fine sandy loam

2B/E—38 to 56 inches; gravelly fine sandy loam

2Bt—56 to 80 inches; loam

Noseum

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 4 inches; fine sandy loam

Bhs—4 to 6 inches; fine sandy loam

Bs1—6 to 14 inches; fine sandy loam

2Bs2—14 to 24 inches; loamy sand

2BC—24 to 37 inches; sand

2C1—37 to 63 inches; fine sand

2C2—63 to 80 inches; sand

Ubly

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 4 inches; fine sandy loam

E—4 to 10 inches; fine sandy loam

Bhs—10 to 12 inches; fine sandy loam

Bs—12 to 18 inches; fine sandy loam

2B/E—18 to 29 inches; loam

2Bt—29 to 44 inches; loam
2BC—44 to 80 inches; loam

Soil Properties and Qualities

Parent material: Loggerhead and Ubly—coarse-loamy till over loamy till; Noseum—loamy outwash over sandy outwash
Slope: Loggerhead and Noseum—1 to 6 percent; Ubly—4 to 6 percent
Hazard of soil blowing: Moderate
Surface runoff class: Loggerhead—medium; Noseum—very low; Ubly—low
Potential for frost action: Loggerhead and Ubly—moderate; Noseum—low
Depth to restrictive feature: More than 80 inches
Drainage class: Loggerhead and Noseum—moderately well drained; Ubly—well drained
Available water capacity: Loggerhead and Ubly—9.1 to 10.8 inches (high); Noseum—6.3 inches (moderate)
Shrink-swell potential: Loggerhead and Ubly—moderate; Noseum—low
Permeability: Loggerhead and Ubly—moderately slow; Noseum—moderately rapid
Flooding: None
Depth to seasonal high water table: Loggerhead—1.5 to 6.7 feet (April); Noseum—2.0 to 6.7 feet (April, May); Ubly—more than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 2s
Michigan soil management group: Loggerhead and Ubly—3/2a; Noseum—4a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

283C—Loggerhead-Noseum-Ubly complex, 6 to 12 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

40 percent Loggerhead and similar soils
30 percent Noseum and similar soils
20 percent Ubly and similar soils
10 percent components of minor extent

Typical Profile

Loggerhead

A—0 to 4 inches; loam
E—4 to 5 inches; gravelly fine sandy loam
Bs—5 to 15 inches; gravelly loam
E/B—15 to 38 inches; gravelly fine sandy loam
2B/E—38 to 56 inches; gravelly fine sandy loam
2Bt—56 to 80 inches; loam

Noseum

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 4 inches; fine sandy loam

Bhs—4 to 6 inches; fine sandy loam

Bs1—6 to 14 inches; fine sandy loam

2Bs2—14 to 24 inches; loamy sand

2BC—24 to 37 inches; sand

2C1—37 to 63 inches; fine sand

2C2—63 to 80 inches; sand

Ubly

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 4 inches; fine sandy loam

E—4 to 10 inches; fine sandy loam

Bhs—10 to 12 inches; fine sandy loam

Bs—12 to 18 inches; fine sandy loam

2B/E—18 to 29 inches; loam

2Bt—29 to 44 inches; loam

2BC—44 to 80 inches; loam

Soil Properties and Qualities

Parent material: Loggerhead and Ubly—coarse-loamy till over loamy till; Noseum—loamy outwash over sandy outwash

Slope: 6 to 12 percent

Hazard of soil blowing: Moderate

Surface runoff class: Loggerhead—high; Noseum and Ubly—low

Potential for frost action: Loggerhead and Ubly—moderate; Noseum—low

Depth to restrictive feature: More than 80 inches

Drainage class: Loggerhead and Noseum—moderately well drained; Ubly—well drained

Available water capacity: Loggerhead and Ubly—9.1 to 10.8 inches (high); Noseum—6.3 inches (moderate)

Shrink-swell potential: Loggerhead and Ubly—moderate; Noseum—low

Permeability: Loggerhead and Ubly—moderately slow; Noseum—moderately rapid

Flooding: None

Depth to seasonal high water table: Loggerhead—1.5 to 6.7 feet (April); Noseum—2.0 to 6.7 feet (April, May); Ubly—more than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 3e

Michigan soil management group: Loggerhead and Ubly—3/2a; Noseum—4a

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

284—Aquents, ponded-Gull Point, frequently flooded, complex, 0 to 1 percent slopes

Setting

Landform: Backswamps

Average Map Unit Composition

55 percent Aquents and similar soils
40 percent Gull Point and similar soils
5 percent components of minor extent

Typical Profile

Aquents

C—0 to 80 inches; variable

Gull Point

Oi—0 to 1 inch; peat
A1—1 to 7 inches; loam
A2—7 to 15 inches; loam
AB1—15 to 28 inches; loam
AB2—28 to 33 inches; clay loam
2Bt—33 to 40 inches; loam
2BCd1—40 to 61 inches; silt loam
2BCd2—61 to 80 inches; silt loam

Soil Properties and Qualities

Parent material: Fine-loamy alluvium over fine-loamy till
Slope: 0 to 1 percent
Hazard of soil blowing: Slight
Surface runoff class: Negligible
Potential for frost action: High
Depth to restrictive feature: Aquents—more than 80 inches; Gull Point—40 inches to dense material
Drainage class: Aquents—very poorly drained; Gull Point—poorly drained
Available water capacity: Aquents—not rated; Gull Point—10.6 inches (high)
Shrink-swell potential: Aquents—not rated; Gull Point—high
Permeability: Aquents—not rated; Gull Point—slow
Frequency of flooding: Aquents—none; Gull Point—frequent (April, May)
Depth to seasonal high water table: Aquents—at the surface (all year); Gull Point—at the surface (January, February, March, April, May, June December)
Ponding depth: Aquents—1 foot (all year); Gull Point—not ponded

Interpretive Groups

Land capability classification: 8w
Michigan soil management group: Aquents—none assigned; Gull Point—L-2c
Habitat type: Aquents—FMC-C; Gull Point—FMC

Major Uses

Dominant use: Forestland
Other uses: Wildlife habitat, recreation

285F—Rockland-Arnheim, frequently flooded, complex, 0 to 70 percent slopes

Setting

Landform: Slumps in river valleys

Average Map Unit Composition

70 percent Rockland and similar soils

15 percent Arnheim and similar soils
15 percent components of minor extent

Typical Profile

Rockland

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; silt loam
Bw—5 to 23 inches; silt loam
C—23 to 80 inches; silt loam

Arnheim

A—0 to 5 inches; mucky silt loam
Cg—5 to 10 inches; silt loam
C—10 to 80 inches; stratified very fine sandy loam to silt loam to loamy fine sand to fine sandy loam

Soil Properties and Qualities

Parent material: Rockland—loamy rotational earth slide deposits; Arnheim—loamy alluvium
Slope: Rockland—30 to 70 percent; Arnheim—0 to 1 percent
Hazard of soil blowing: Slight
Surface runoff class: Rockland—very high; Arnheim—negligible
Potential for frost action: Rockland—moderate; Arnheim—high
Depth to restrictive feature: More than 80 inches
Drainage class: Rockland—well drained; Arnheim—poorly drained
Available water capacity: Rockland—12.4 inches (very high); Arnheim—11.3 inches (high)
Shrink-swell potential: Rockland—moderate; Arnheim—low
Permeability: Rockland—moderately slow; Arnheim—moderate
Highest frequency of flooding: Rockland—none; Arnheim—frequent (March, April, May, June)
Depth to seasonal high water table: Rockland—more than 6.5 feet; Arnheim—at the surface (January, February, March, April, May, October, November, December)
Depth and months of deepest ponding: Rockland—none; Arnheim—0.2 foot (June, July, August, September, October, November)
Months in which ponding does not occur: Arnheim—January, February, March, April, May, December

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: Rockland—2.5a; Arnheim—L-2c
Habitat type: Rockland—ATD; Arnheim—FMC

Major Uses

Dominant use: Forestland
Other uses: Wildlife habitat, recreation

286A—Big Iron-Belding complex, 0 to 2 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

65 percent Big Iron and similar soils

20 percent Belding and similar soils
15 percent components of minor extent

Typical Profile

Big Iron

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 3 inches; silt loam
E—3 to 4 inches; silt loam
Bw—4 to 11 inches; loam
E/B—11 to 17 inches; loam
Bt—17 to 47 inches; silt loam
BCd1—47 to 66 inches; loam
BCd2—66 to 80 inches; silt loam

Belding

Oa—0 to 1 inch; highly decomposed plant material
A1—1 to 4 inches; fine sandy loam
A2—4 to 9 inches; fine sandy loam
E—9 to 14 inches; fine sandy loam
Bs1—14 to 19 inches; fine sandy loam
Bs2—19 to 22 inches; fine sand
2Bt—22 to 34 inches; silty clay loam
2BC—34 to 36 inches; silty clay loam
2C—36 to 80 inches; silty clay loam

Soil Properties and Qualities

Parent material: Big Iron—fine-loamy till; Belding—coarse-loamy till over fine-loamy till

Slope: 0 to 2 percent

Hazard of soil blowing: Big Iron—slight; Belding—moderate

Surface runoff class: Big Iron—very high; Belding—very low

Potential for frost action: High

Depth to restrictive feature: Big Iron—47 inches to dense material; Belding—more than 80 inches

Drainage class: Somewhat poorly drained

Available water capacity: 9.7 to 10.5 inches (high)

Shrink-swell potential: Moderate

Permeability: Big Iron—slow; Belding—moderately slow

Flooding: None

Depth to seasonal high water table: Big Iron—0.5 foot to 2.5 feet (April, May);
Belding—0.5 foot to 6.7 feet (April, May)

Ponding: None

Interpretive Groups

Land capability classification: 2w

Michigan soil management group: Big Iron—1.5b; Belding—3/2b

Habitat type: Big Iron—TTP; Belding—TMC-D

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

287—Trap Falls-Tonkey complex, 0 to 1 percent slopes

Setting

Landform: Depressions on till plains

Average Map Unit Composition

55 percent Trap Falls and similar soils
35 percent Tonkey and similar soils
10 percent components of minor extent

Typical Profile

Trap Falls

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 10 inches; silt loam
Bt1—10 to 18 inches; silty clay loam
Bt2—18 to 31 inches; silty clay loam
Cd1—31 to 55 inches; silt loam
Cd2—55 to 80 inches; loam

Tonkey

A—0 to 8 inches; silt loam
Bg1—8 to 13 inches; very fine sandy loam
Bg2—13 to 28 inches; fine sandy loam
C—28 to 80 inches; fine sandy loam

Soil Properties and Qualities

Parent material: Trap Falls—fine-loamy till; Tonkey—stratified loamy and sandy glaciofluvial deposits

Slope: 0 to 1 percent

Hazard of soil blowing: Slight

Surface runoff class: Negligible

Potential for frost action: High

Depth to restrictive feature: Trap Falls—36 inches to dense material; Tonkey—more than 80 inches

Drainage class: Poorly drained

Available water capacity: Trap Falls—12.2 inches (very high); Tonkey—9.2 inches (high)

Shrink-swell potential: Trap Falls—high; Tonkey—moderate

Permeability: Trap Falls—slow; Tonkey—moderately rapid

Flooding: None

Depth to seasonal high water table: Trap Falls—at the surface (January, February, March, April, May, June, December); Tonkey—at the surface (January, February, March, April, May, October, November, December)

Depth and months of deepest ponding: Trap Falls—0.3 foot (March, April, May); Tonkey—0.5 foot (January, February, March, April, May, October, November, December)

Months in which ponding does not occur: Trap Falls—January, February, June, July, August, September, December; Tonkey—June, July, August, September

Interpretive Groups

Land capability classification: 5w

Michigan soil management group: Trap Falls—3c; Tonkey—3c-s

Habitat type: Trap Falls—FE; Tonkey—FI

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

289B—Amasa very cobbly silt loam, beach ridges, 1 to 6 percent slopes

Setting

Landform: Beach ridges

Average Map Unit Composition

95 percent Amasa and similar soils

5 percent components of minor extent

Typical Profile

Amasa

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 4 inches; very cobbly silt loam

Bhs—4 to 7 inches; silt loam

Bs1—7 to 23 inches; very fine sandy loam

Bs2—23 to 28 inches; fine sandy loam

2C1—28 to 41 inches; sand

2C2—41 to 80 inches; very gravelly sand

Soil Properties and Qualities

Parent material: Coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits

Slope: 1 to 6 percent

Hazard of soil blowing: Slight

Surface runoff class: Low

Potential for frost action: Moderate

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Available water capacity: 6.3 inches (moderate)

Shrink-swell potential: Low

Permeability: Moderate

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 3s

Michigan soil management group: 3/5a-a

Habitat type: AVO

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

290B—Flintsteel silt loam, 1 to 6 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

80 percent Flintsteel and similar soils
20 percent components of minor extent

Typical Profile

Flintsteel

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; silt loam
E—5 to 9 inches; loam
Bw—9 to 12 inches; fine sandy loam
E/B—12 to 16 inches; loam
B/E—16 to 22 inches; loam
Bt—22 to 36 inches; silt loam
BCd—36 to 48 inches; silt loam
Cd—48 to 80 inches; silt loam

Soil Properties and Qualities

Parent material: Fine-loamy till
Slope: 1 to 6 percent
Hazard of soil blowing: Slight
Surface runoff class: Low
Potential for frost action: Moderate
Depth to restrictive feature: 36 inches to dense material
Drainage class: Moderately well drained
Available water capacity: 8.3 inches (moderate)
Shrink-swell potential: Very high
Permeability: Moderately slow
Flooding: None
Depth to seasonal high water table: 1.5 to 6.7 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 2e
Michigan soil management group: 2.5a
Habitat type: AVO

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

290C—Flintsteel silt loam, 6 to 18 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

85 percent Flintsteel and similar soils
15 percent components of minor extent

Typical Profile

Flintsteel

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; silt loam
E—5 to 9 inches; loam
Bw—9 to 12 inches; fine sandy loam
E/B—12 to 16 inches; loam
B/E—16 to 22 inches; loam
Bt—22 to 36 inches; silt loam
BCd—36 to 48 inches; silt loam
Cd—48 to 80 inches; silt loam

Soil Properties and Qualities

Parent material: Fine-loamy till
Slope: 6 to 18 percent
Hazard of soil blowing: Slight
Surface runoff class: Low
Potential for frost action: Moderate
Depth to restrictive feature: 36 inches to dense material
Drainage class: Moderately well drained
Available water capacity: 8.3 inches (moderate)
Shrink-swell potential: Very high
Permeability: Moderately slow
Flooding: None
Depth to seasonal high water table: 1.5 to 6.7 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 2e
Michigan soil management group: 2.5a
Habitat type: AVO

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

291B—Kalkaska sand, 0 to 8 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

80 percent Kalkaska and similar soils
20 percent components of minor extent

Typical Profile

Kalkaska

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 6 inches; sand
Bhs—6 to 8 inches; sand
Bs—8 to 17 inches; sand
BC—17 to 32 inches; sand
C—32 to 80 inches; sand

Soil Properties and Qualities

Parent material: Sandy outwash
Slope: 0 to 8 percent
Hazard of soil blowing: Severe
Surface runoff class: Very low
Potential for frost action: Low
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Available water capacity: 4.5 inches (low)
Shrink-swell potential: Low
Permeability: Rapid
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 4s
Michigan soil management group: 5a
Habitat type: ATD-D

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

291D—Kalkaska sand, 8 to 18 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

85 percent Kalkaska and similar soils
15 percent components of minor extent

Typical Profile

Kalkaska

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 6 inches; sand
Bhs—6 to 8 inches; sand
Bs—8 to 17 inches; sand
BC—17 to 32 inches; sand
C—32 to 80 inches; sand

Soil Properties and Qualities

Parent material: Sandy outwash
Slope: 8 to 18 percent
Hazard of soil blowing: Severe
Surface runoff class: Very low
Potential for frost action: Low
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Available water capacity: 4.5 inches (low)
Shrink-swell potential: Low
Permeability: Rapid

Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 6s
Michigan soil management group: 5a
Habitat type: ATD-D

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

292B—Manido-Richter complex, 0 to 6 percent slopes

Setting

Landform: Till-floored lake plains

Average Map Unit Composition

45 percent Manido and similar soils
40 percent Richter and similar soils
15 percent components of minor extent

Typical Profile

Manido

Oe—0 to 3 inches; moderately decomposed plant material
E—3 to 9 inches; fine sand
Bhs—9 to 11 inches; fine sand
Bs—11 to 17 inches; fine sand
BC—17 to 37 inches; fine sand
E and Bt—37 to 60 inches; stratified fine sand to sand to very fine sand
C—60 to 80 inches; stratified fine sand to sand to very fine sand

Richter

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 4 inches; fine sandy loam
E—4 to 6 inches; loamy fine sand
Bs—6 to 10 inches; fine sandy loam
B/E—10 to 18 inches; sandy loam
BC—18 to 35 inches; stratified loamy very fine sand to silt loam
C—35 to 80 inches; stratified sandy loam to very fine sandy loam to silt loam to silt

Soil Properties and Qualities

Parent material: Manido—sandy outwash; Richter—stratified loamy and sandy glaciofluvial deposits

Slope: Manido—0 to 3 percent; Richter—0 to 6 percent

Hazard of soil blowing: Manido—severe; Richter—moderate

Surface runoff class: Manido—negligible; Richter—low

Potential for frost action: Manido—low; Richter—high

Depth to restrictive feature: More than 80 inches

Drainage class: Manido—moderately well drained; Richter—somewhat poorly drained

Available water capacity: Manido—5.6 inches (low); Richter—9.4 inches (high)

Shrink-swell potential: Manido—low; Richter—moderate

Permeability: Manido—moderately rapid; Richter—moderate

Flooding: None

Depth to seasonal high water table: Manido—2.0 to 6.7 feet (March); Richter—0.5 foot to 6.7 feet (April, May)

Ponding: None

Interpretive Groups

Land capability classification: 4s

Michigan soil management group: Manido—5a; Richter—3b-s

Habitat type: Manido—ATD; Richter—TMC

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

293A—Wainola-Trap Falls complex, 0 to 3 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

55 percent Wainola and similar soils

25 percent Trap Falls and similar soils

20 percent components of minor extent

Typical Profile

Wainola

Oa—0 to 3 inches; highly decomposed plant material

E—3 to 10 inches; fine sand

Bhs—10 to 12 inches; fine sand

Bs—12 to 26 inches; fine sand

BC—26 to 32 inches; fine sand

C—32 to 80 inches; stratified fine sand to very fine sand to loamy fine sand

Trap Falls

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 10 inches; silt loam

Bt1—10 to 18 inches; silty clay loam

Bt2—18 to 31 inches; silty clay loam

Cd1—31 to 55 inches; silt loam

Cd2—55 to 80 inches; loam

Soil Properties and Qualities

Parent material: Wainola—sandy glaciofluvial deposits; Trap Falls—fine-loamy till

Slope: Wainola—0 to 3 percent; Trap Falls—0 to 1 percent

Hazard of soil blowing: Wainola—severe; Trap Falls—slight

Surface runoff class: Wainola—negligible; Trap Falls—low

Potential for frost action: Wainola—moderate; Trap Falls—high

Depth to restrictive feature: Wainola—more than 80 inches; Trap Falls—36 inches to dense material

Drainage class: Wainola—somewhat poorly drained; Trap Falls—poorly drained

Available water capacity: Wainola—5 inches (low); Trap Falls—12.2 inches (very high)

Shrink-swell potential: Wainola—moderate; Trap Falls—high

Permeability: Wainola—rapid; Trap Falls—slow

Flooding: None

Depth to seasonal high water table: Wainola—0.5 foot to 6.7 feet (April, May); Trap Falls—at the surface (January, February, March, April, May, June, December)

Depth and months of deepest ponding: Wainola—none; Trap Falls—0.3 foot (March, April, May)

Months in which ponding does not occur: Trap Falls—January, February, June, July, August, September, December

Interpretive Groups

Land capability classification: 3w

Michigan soil management group: Wainola—4b; Trap Falls—2.5c

Habitat type: Wainola—TMC; Trap Falls—FI

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

296B—Manido-Fence-Gogebic, sandy substratum, complex, 1 to 6 percent slopes

Setting

Landform: Till-floored lake plains

Average Map Unit Composition

35 percent Manido and similar soils

30 percent Fence and similar soils

20 percent Gogebic and similar soils

15 percent components of minor extent

Typical Profile

Manido

Oe—0 to 3 inches; moderately decomposed plant material

E—3 to 9 inches; fine sand

Bhs—9 to 11 inches; fine sand

Bs—11 to 17 inches; fine sand

BC—17 to 37 inches; fine sand

E and Bt—37 to 60 inches; stratified fine sand to sand to very fine sand

C—60 to 80 inches; stratified fine sand to sand to very fine sand

Fence

A—0 to 6 inches; very fine sandy loam

E—6 to 7 inches; silt loam

Bs—7 to 13 inches; silt loam

E'—13 to 15 inches; silt loam

B/E1—15 to 20 inches; silt loam

B/E2—20 to 35 inches; silt loam

C—35 to 80 inches; stratified silt loam to silt

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; fine sandy loam

E—5 to 8 inches; silt loam

Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
3C—68 to 80 inches; gravelly sand

Soil Properties and Qualities

Parent material: Manido—sandy outwash; Fence—coarse-silty glaciolacustrine deposits; Gogebic—modified loamy eolian deposits over loamy till over sandy till
Slope: 1 to 6 percent
Hazard of soil blowing: Manido—severe; Fence and Gogebic—slight
Surface runoff class: Manido and Gogebic—high; Fence—low
Potential for frost action: Manido—low; Fence—high; Gogebic—moderate
Depth to restrictive feature: Manido and Fence—more than 80 inches; Gogebic—20 to 49 inches to a fragipan
Drainage class: Moderately well drained
Available water capacity: Manido—4.7 to 5.6 inches (low); Fence—12 inches (high); Gogebic—4.1 to 5.5 inches (low)
Shrink-swell potential: Manido and Fence—low; Gogebic—moderate
Permeability: Manido—moderately rapid; Fence—moderately slow; Gogebic—very slow
Flooding: None
Depth to seasonal high water table: Manido—2.0 to 6.7 feet (March); Fence—1.5 to 7.0 feet (April); Gogebic—1 to 2 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 4s
Michigan soil management group: Manido—5a; Fence—3a; Gogebic—3a-af
Habitat type: Manido—TMC-D; Fence and Gogebic—ATD

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

296D—Manido-Sporley-Gogebic, sandy substratum, complex, 18 to 35 percent slopes

Setting

Landform: Till-floored lake plains

Average Map Unit Composition

35 percent Manido and similar soils
30 percent Sporley and similar soils
20 percent Gogebic and similar soils
15 percent components of minor extent

Typical Profile

Manido

Oe—0 to 3 inches; moderately decomposed plant material
E—3 to 9 inches; fine sand
Bhs—9 to 11 inches; fine sand

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Bs—11 to 17 inches; fine sand
BC—17 to 37 inches; fine sand
E and Bt—37 to 60 inches; stratified fine sand to sand to very fine sand
C—60 to 80 inches; stratified fine sand to sand to very fine sand

Sporley

A—0 to 6 inches; very fine sandy loam
E—6 to 7 inches; silt loam
Bs—7 to 12 inches; silt loam
E'—12 to 15 inches; silt loam
E/B—15 to 24 inches; silt loam
B/E—24 to 30 inches; stratified silt loam to silty clay loam
BC—30 to 80 inches; stratified very fine sandy loam to silt loam to silt

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; fine sandy loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
3C—68 to 80 inches; gravelly sand

Soil Properties and Qualities

Parent material: Manido—sandy outwash; Sporley—coarse-silty glaciolacustrine deposits; Gogebic—modified loamy eolian deposits over loamy till over sandy till

Slope: 18 to 35 percent

Hazard of soil blowing: Manido—severe; Sporley and Gogebic—slight

Surface runoff class: Manido and Gogebic—high; Sporley—low

Potential for frost action: Manido—low; Sporley—high; Gogebic—moderate

Depth to restrictive feature: Manido and Sporley—more than 80 inches; Gogebic—20 to 49 inches to a fragipan

Drainage class: Moderately well drained

Available water capacity: Manido—4.7 to 5.6 inches (low); Sporley—12 inches (high); Gogebic—4.1 to 5.5 inches (low)

Shrink-swell potential: Manido and Sporley—low; Gogebic—moderate

Permeability: Manido—moderately rapid; Sporley—moderately slow; Gogebic—very slow

Flooding: None

Depth to seasonal high water table: Manido—2.0 to 6.7 feet (March); Sporley—1.5 to 7.0 feet (April); Gogebic—1 to 2 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 7s

Michigan soil management group: Manido—5a; Sporley—2.5a; Gogebic—3a-af

Habitat type: Manido—TMC-D; Sporley and Gogebic—ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

299B—Zandi-Amasa-Flintsteel complex, 0 to 6 percent slopes

Setting

Landform: Till-floored lake plains

Average Map Unit Composition

40 percent Zandi and similar soils
30 percent Amasa and similar soils
20 percent Flintsteel and similar soils
10 percent components of minor extent

Typical Profile

Zandi

Oe—0 to 0.5 inch; moderately decomposed plant material
E—0.5 inch to 4 inches; loamy very fine sand
Bhs—4 to 6 inches; loamy very fine sand
Bs—6 to 34 inches; very fine sandy loam
E/B—34 to 42 inches; stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam
B/E—42 to 57 inches; stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam
E and Bt—57 to 80 inches; stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam

Amasa

Oe—0 to 1 inch; moderately decomposed plant material
E—1 to 4 inches; silt loam
Bhs—4 to 7 inches; silt loam
Bs1—7 to 23 inches; very fine sandy loam
Bs2—23 to 28 inches; fine sandy loam
2C1—28 to 41 inches; sand
2C2—41 to 80 inches; very gravelly sand

Flintsteel

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; fine sandy loam
E—5 to 9 inches; loam
Bw—9 to 12 inches; fine sandy loam
E/B—12 to 16 inches; loam
B/E—16 to 22 inches; loam
Bt—22 to 36 inches; silt loam
BCd—36 to 48 inches; silt loam
Cd—48 to 80 inches; silt loam

Soil Properties and Qualities

Parent material: Zandi—coarse-loamy glaciolacustrine deposits; Amasa—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits; Flintsteel—fine-loamy till

Slope: Zandi and Flintsteel—1 to 6 percent; Amasa—0 to 6 percent

Hazard of soil blowing: Zandi—moderate; Amasa and Flintsteel—slight

Surface runoff class: Low

Potential for frost action: Moderate

Depth to restrictive feature: Zandi and Amasa—more than 80 inches; Flintsteel—36 inches to dense material
Drainage class: Zandi and Amasa—well drained; Flintsteel—moderately well drained
Available water capacity: Zandi and Flintsteel—8.5 to 8.6 inches (moderate); Amasa—5.9 inches (low)
Shrink-swell potential: Zandi—low; Amasa and Flintsteel—moderate
Permeability: Zandi and Amasa—moderate; Flintsteel—moderately slow
Flooding: None
Depth to seasonal high water table: Zandi and Amasa—more than 6.5 feet; Flintsteel—1.5 to 6.7 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 2e
Michigan soil management group: Zandi—3a-s; Amasa—3/5a-a; Flintsteel—2.5a
Habitat type: Zandi—TM; Amasa—AVO; Flintsteel—TAM

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

299C—Zandi-Amasa-Flintsteel complex, 6 to 18 percent slopes

Setting

Landform: Till-floored lake plains

Average Map Unit Composition

40 percent Zandi and similar soils
30 percent Amasa and similar soils
20 percent Flintsteel and similar soils
10 percent components of minor extent

Typical Profile

Zandi

Oe—0 to 0.5 inch; moderately decomposed plant material
E—0.5 inch to 4 inches; loamy very fine sand
Bhs—4 to 6 inches; loamy very fine sand
Bs—6 to 34 inches; very fine sandy loam
E/B—34 to 42 inches; stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam
B/E—42 to 57 inches; stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam
E and Bt—57 to 80 inches; stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam

Amasa

Oe—0 to 1 inch; moderately decomposed plant material
E—1 to 4 inches; silt loam
Bhs—4 to 7 inches; silt loam
Bs1—7 to 23 inches; very fine sandy loam
Bs2—23 to 28 inches; fine sandy loam

2C1—28 to 41 inches; sand

2C2—41 to 80 inches; very gravelly sand

Flintsteel

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; fine sandy loam

E—5 to 9 inches; loam

Bw—9 to 12 inches; fine sandy loam

E/B—12 to 16 inches; loam

B/E—16 to 22 inches; loam

Bt—22 to 36 inches; silt loam

BCd—36 to 48 inches; silt loam

Cd—48 to 80 inches; silt loam

Soil Properties and Qualities

Parent material: Zandi—coarse-loamy glaciolacustrine deposits; Amasa—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits; Flintsteel—fine-loamy till

Slope: 6 to 18 percent

Hazard of soil blowing: Zandi—moderate; Amasa and Flintsteel—slight

Surface runoff class: Zandi and Flintsteel—low; Amasa—medium

Potential for frost action: Moderate

Depth to restrictive feature: Zandi and Amasa—more than 80 inches; Flintsteel—36 inches to dense material

Drainage class: Zandi and Amasa—well drained; Flintsteel—moderately well drained

Available water capacity: Zandi and Flintsteel—8.5 to 8.6 inches (moderate); Amasa—5.9 inches (low)

Shrink-swell potential: Zandi—low; Amasa and Flintsteel—moderate

Permeability: Zandi and Amasa—moderate; Flintsteel—moderately slow

Flooding: None

Depth to seasonal high water table: Zandi and Amasa—more than 6.5 feet; Flintsteel—1.5 to 6.7 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 4e

Michigan soil management group: Zandi—3a-s; Amasa—3/5a-a; Flintsteel—2.5a

Habitat type: Zandi—TM; Amasa—AVO; Flintsteel—TAM

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

301A—Moodig loam, 0 to 4 percent slopes

Setting

Landform: Drumlins and moraines on till plains

Average Map Unit Composition

86 percent Moodig and similar soils

14 percent components of minor extent

Typical Profile

Moodig

A—0 to 4 inches; loam
E—4 to 9 inches; fine sandy loam
Bs1—9 to 11 inches; loam
Bs2—11 to 18 inches; fine sandy loam
Bs3—18 to 25 inches; fine sandy loam
B/E—25 to 30 inches; sandy loam, loam
Bt1—30 to 35 inches; sandy loam
Bt2—35 to 47 inches; loam
C1—47 to 57 inches; sandy loam
C2—57 to 63 inches; loam
C3—63 to 71 inches; loamy sand

Soil Properties and Qualities

Parent material: Reddish brown coarse-loamy till derived from igneous, metamorphic, and sedimentary rock
Slope: 0 to 4 percent
Hazard of soil blowing: Slight
Surface runoff class: Negligible
Potential for frost action: Moderate
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Available water capacity: 8.5 inches (moderate)
Shrink-swell potential: Moderate
Permeability: Moderate
Flooding: None
Depth to seasonal high water table: 0.5 foot to 5.0 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 2e
Michigan soil management group: 3b
Habitat type: AVO-CI

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

302B—Manitowish sandy loam, 1 to 6 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

85 percent Manitowish and similar soils
15 percent components of minor extent

Typical Profile

Manitowish

Oi—0 to 1 inch; slightly decomposed plant material
Oa—1 to 2 inches; highly decomposed plant material

E—2 to 4 inches; sandy loam
Bhs—4 to 5 inches; sandy loam
Bs—5 to 11 inches; sandy loam
Bw—11 to 22 inches; sandy loam
2BC—22 to 40 inches; gravelly loamy sand
2C—40 to 80 inches; gravelly sand

Soil Properties and Qualities

Parent material: Loamy eolian deposits over sandy outwash
Slope: 1 to 6 percent
Hazard of soil blowing: Moderate
Surface runoff class: Low
Potential for frost action: Low
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Available water capacity: 5.9 inches (low)
Shrink-swell potential: Moderate
Permeability: Moderate
Flooding: None
Depth to seasonal high water table: 2.0 to 6.7 feet (April, May)
Ponding: None

Interpretive Groups

Land capability classification: 2e
Michigan soil management group: 4a
Habitat type: TMC-D

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

302C—Manitowish sandy loam, 6 to 18 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

85 percent Manitowish and similar soils
15 percent components of minor extent

Typical Profile

Manitowish

Oi—0 to 1 inch; slightly decomposed plant material
Oa—1 to 2 inches; highly decomposed plant material
E—2 to 4 inches; sandy loam
Bhs—4 to 5 inches; sandy loam
Bs—5 to 10 inches; sandy loam
Bw—10 to 20 inches; sandy loam
2BC—20 to 40 inches; gravelly loamy sand
2C—40 to 80 inches; gravelly sand

Soil Properties and Qualities

Parent material: Loamy eolian deposits over sandy outwash
Slope: 6 to 18 percent
Hazard of soil blowing: Moderate
Surface runoff class: Low
Potential for frost action: Low
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Available water capacity: 5.8 inches (low)
Shrink-swell potential: Moderate
Permeability: Moderate
Flooding: None
Depth to seasonal high water table: 2.0 to 6.7 feet (April, May)
Ponding: None

Interpretive Groups

Land capability classification: 4e
Michigan soil management group: 4a
Habitat type: TMC-D

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

**303—Bowstring-Arnheim complex, 0 to 1 percent slopes,
frequently flooded**

Setting

Landform: Flood plains on lake plains, outwash plains, and till plains

Average Map Unit Composition

50 percent Bowstring and similar soils
40 percent Arnheim and similar soils
10 percent components of minor extent

Typical Profile

Bowstring

Oa—0 to 13 inches; highly decomposed plant material
C—13 to 15 inches; silt loam
O'a—15 to 32 inches; highly decomposed plant material
Oe—32 to 36 inches; moderately decomposed plant material
C'1—36 to 42 inches; fine sandy loam
C'2—42 to 80 inches; gravelly coarse sand

Arnheim

A—0 to 5 inches; mucky silt loam
Cg—5 to 10 inches; silt loam
C—10 to 80 inches; stratified very fine sandy loam to silt loam to loamy fine sand to fine sandy loam

Soil Properties and Qualities

Parent material: Bowstring—organic material over loamy alluvium and/or sandy alluvium; Arnheim—loamy alluvium

Soil Survey of Gogebic County, Michigan

Slope: 0 to 1 percent

Hazard of soil blowing: Bowstring—moderate; Arnheim—slight

Surface runoff class: Negligible

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Bowstring—very poorly drained; Arnheim—poorly drained

Available water capacity: Bowstring—1.7 inches (very low); Arnheim—11.3 inches (high)

Shrink-swell potential: Bowstring—moderate; Arnheim—low

Permeability: Moderate to rapid

Highest frequency of flooding: Frequent (March, April, May, June)

Depth to seasonal high water table: Bowstring—at the surface (March, April, May, June); Arnheim—more than 6.5 feet

Depth and months of deepest ponding: Bowstring—0.5 foot (March, April, May, June, October, November); Arnheim—0.2 foot (June, July, August, September, October, November)

Months in which ponding does not occur: Bowstring—January, February, July, August, September, December; Arnheim—January, February, March, April, May, December

Interpretive Groups

Land capability classification: 7w

Michigan soil management group: Bowstring—L-Mc; Arnheim—L-2c

Habitat type: FMC-C

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

305B—Keweenaw-Siskiwit complex, 1 to 6 percent slopes

Setting

Landform: Ground moraines

Average Map Unit Composition

45 percent Keweenaw and similar soils

40 percent Siskiwit and similar soils

15 percent components of minor extent

Typical Profile

Keweenaw

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 4 inches; loamy sand

Bhs—4 to 6 inches; loamy fine sand

Bs—6 to 25 inches; loamy fine sand

E/B—25 to 45 inches; stratified sand to fine sand to loamy fine sand to loamy very fine sand

B/E—45 to 56 inches; stratified loamy fine sand to fine sand to fine sandy loam

E/B'—56 to 71 inches; stratified loamy fine sand to fine sand to fine sandy loam

B/E'—71 to 90 inches; stratified loamy fine sand to fine sandy loam

Siskiwit

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 8 inches; loamy fine sand

Bhs—8 to 11 inches; loamy fine sand

Soil Survey of Gogebic County, Michigan

Bs—11 to 28 inches; loamy fine sand
E/B—28 to 34 inches; loamy sand
B/E—34 to 55 inches; stratified sand to loamy sand
C—55 to 80 inches; stratified gravelly sand to sand to loamy sand

Soil Properties and Qualities

Parent material: Sandy glaciofluvial deposits
Slope: 1 to 6 percent
Hazard of soil blowing: Moderate
Surface runoff class: Medium
Potential for frost action: Low
Depth to restrictive feature: More than 80 inches
Drainage class: Keweenaw—well drained; Siskiwit—moderately well drained
Available water capacity: Keweenaw—3.7 inches (low); Siskiwit—10 inches (high)
Shrink-swell potential: Keweenaw—low; Siskiwit—moderate
Permeability: Keweenaw—moderately slow; Siskiwit—moderate
Flooding: None
Depth to seasonal high water table: Keweenaw—more than 6.5 feet; Siskiwit—2.0 to 6.7 feet (April, May)
Ponding: None

Interpretive Groups

Land capability classification: 2e
Michigan soil management group: 4a-a
Habitat type: Keweenaw—TM; Siskiwit—TMC-V

Major Uses

Dominant use: Forestland
Other uses: Wildlife habitat, recreation

305C—Keweenaw-Siskiwit complex, 6 to 18 percent slopes

Setting

Landform: Ground moraines

Average Map Unit Composition

45 percent Keweenaw and similar soils
40 percent Siskiwit and similar soils
15 percent components of minor extent

Typical Profile

Keweenaw

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 4 inches; loamy sand
Bhs—4 to 6 inches; loamy fine sand
Bs—6 to 25 inches; loamy fine sand
E/B—25 to 45 inches; stratified sand to fine sand to loamy fine sand to loamy very fine sand
B/E—45 to 56 inches; stratified loamy fine sand to fine sand to fine sandy loam
E/B'—56 to 71 inches; stratified loamy fine sand to fine sand to fine sandy loam
B/E'—71 to 90 inches; stratified loamy fine sand to fine sandy loam

Siskiwit

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 8 inches; loamy fine sand

Bhs—8 to 11 inches; loamy fine sand

Bs—11 to 28 inches; loamy fine sand

E/B—28 to 34 inches; loamy sand

B/E—34 to 55 inches; stratified sand to loamy sand

C—55 to 80 inches; stratified gravelly sand to sand to loamy sand

Soil Properties and Qualities

Parent material: Sandy glaciofluvial deposits

Slope: 6 to 18 percent

Hazard of soil blowing: Moderate

Surface runoff class: Medium

Potential for frost action: Low

Depth to restrictive feature: More than 80 inches

Drainage class: Keweenaw—well drained; Siskiwit—moderately well drained

Available water capacity: Keweenaw—3.7 inches (low); Siskiwit—10 inches (high)

Shrink-swell potential: Keweenaw—low; Siskiwit—moderate

Permeability: Keweenaw—moderately slow; Siskiwit—moderate

Flooding: None

Depth to seasonal high water table: Keweenaw—more than 6.5 feet; Siskiwit—2.0 to 6.7 feet (April, May)

Ponding: None

Interpretive Groups

Land capability classification: 4e

Michigan soil management group: 4a-a

Habitat type: Keweenaw—TM; Siskiwit—TMC-V

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

307—Lupton and Cathro soils, 0 to 1 percent slopes

Setting

Landform: Depressions and drainageways in swamps

Average Map Unit Composition

45 percent Lupton and similar soils

45 percent Cathro and similar soils

10 percent components of minor extent

Typical Profile

Lupton

Oa1—0 to 8 inches; muck

Oa2—8 to 80 inches; muck

Cathro

Oa1—0 to 6 inches; muck

Oa2—6 to 31 inches; muck

Cg—31 to 80 inches; fine sandy loam

Soil Properties and Qualities

Parent material: Lupton—highly decomposed organic material; Cathro—herbaceous material over loamy drift

Slope: 0 to 1 percent

Hazard of soil blowing: Lupton—moderate; Cathro—slight

Surface runoff class: Negligible

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Available water capacity: 16.5 to 23.9 inches (very high)

Shrink-swell potential: Lupton—low; Cathro—moderate

Permeability: Lupton—rapid; Cathro—moderate

Flooding: None

Depth to seasonal high water table: At the surface (January, February, March, April, May, June, October, November, December)

Depth and months of deepest ponding: 0.2 foot (March, April, May, June, October, November)

Months in which ponding does not occur: January, February, July, August, September, December

Interpretive Groups

Land capability classification: 6w

Michigan soil management group: Lupton—Mc; Cathro—M/3c

Habitat type: TTS

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

309—Cathro muck, drainageway, 0 to 1 percent slopes

Setting

Landform: Drainageways

Average Map Unit Composition

85 percent Cathro and similar soils

15 percent components of minor extent

Typical Profile

Cathro

Oa1—0 to 6 inches; muck

Oa2—6 to 31 inches; muck

Cg—31 to 80 inches; fine sandy loam

Soil Properties and Qualities

Parent material: Herbaceous material over loamy drift

Slope: 0 to 1 percent

Hazard of soil blowing: Slight

Surface runoff class: Negligible

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Available water capacity: 16.5 inches (very high)

Soil Survey of Gogebic County, Michigan

Shrink-swell potential: Moderate

Permeability: Moderate

Flooding: None

Depth to seasonal high water table: At the surface (January, February, March, April, May, June, October, November, December)

Depth and months of deepest ponding: 0.2 foot (March, April, May, June, October, November)

Months in which ponding does not occur: January, February, July, August, September, December

Interpretive Groups

Land capability classification: 6w

Michigan soil management group: M/3c

Habitat type: TTS

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

310B—Gogebic fine sandy loam, 1 to 6 percent slopes, stony

Setting

Landform: Till plains

Average Map Unit Composition

92 percent Gogebic and similar soils

8 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; fine sandy loam

E—5 to 8 inches; silt loam

Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam

2E/Bx—20 to 33 inches; gravelly fine sandy loam

2B/Ex—33 to 49 inches; fine sandy loam

2Bt—49 to 54 inches; fine sandy loam

2BC—54 to 68 inches; fine sandy loam

2C—68 to 80 inches; gravelly fine sandy loam

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till

Slope: 1 to 6 percent

Hazard of soil blowing: Slight

Surface runoff class: Medium

Potential for frost action: Moderate

Depth to restrictive feature: 20 inches to a fragipan

Drainage class: Moderately well drained

Available water capacity: 5.5 inches (low)

Shrink-swell potential: Moderate

Permeability: Very slow

Flooding: None

Depth to seasonal high water table: 1 to 2 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 4e

Michigan soil management group: 3a-af

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Cropland, pasture, recreation, wildlife habitat

310C—Gogebic fine sandy loam, 6 to 18 percent slopes, stony

Setting

Landform: Till plains

Average Map Unit Composition

92 percent Gogebic and similar soils

8 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; fine sandy loam

E—5 to 8 inches; silt loam

Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam

2E/Bx—20 to 33 inches; gravelly fine sandy loam

2B/Ex—33 to 49 inches; fine sandy loam

2Bt—49 to 54 inches; fine sandy loam

2BC—54 to 68 inches; fine sandy loam

2C—68 to 80 inches; gravelly fine sandy loam

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till

Slope: 6 to 18 percent

Hazard of soil blowing: Slight

Surface runoff class: Medium

Potential for frost action: Moderate

Depth to restrictive feature: 20 inches to a fragipan

Drainage class: Moderately well drained

Available water capacity: 5.5 inches (low)

Shrink-swell potential: Moderate

Permeability: Very slow

Flooding: None

Depth to seasonal high water table: 1 to 2 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 6e

Michigan soil management group: 3a-af

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Pasture, recreation, wildlife habitat

**310D—Gogebic fine sandy loam, 18 to 35 percent slopes,
stony**

Setting

Landform: Till plains

Average Map Unit Composition

92 percent Gogebic and similar soils

8 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; fine sandy loam

E—5 to 8 inches; silt loam

Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam

2E/Bx—20 to 33 inches; gravelly fine sandy loam

2B/Ex—33 to 49 inches; fine sandy loam

2Bt—49 to 54 inches; fine sandy loam

2BC—54 to 68 inches; fine sandy loam

2C—68 to 80 inches; gravelly fine sandy loam

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till

Slope: 18 to 35 percent

Hazard of soil blowing: Slight

Surface runoff class: High

Potential for frost action: Moderate

Depth to restrictive feature: 20 inches to a fragipan

Drainage class: Moderately well drained

Available water capacity: 5.5 inches (low)

Shrink-swell potential: Moderate

Permeability: Very slow

Flooding: None

Depth to seasonal high water table: 1 to 2 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: 3a-af

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

310E—Schweitzer fine sandy loam, 35 to 55 percent slopes, stony

Setting

Landform: Moraines

Average Map Unit Composition

90 percent Schweitzer and similar soils

10 percent components of minor extent

Typical Profile

Schweitzer

A—0 to 1 inch; fine sandy loam

E—1 to 5 inches; cobbly silt loam

Bhs—5 to 8 inches; cobbly very fine sandy loam

Bs—8 to 21 inches; cobbly very fine sandy loam

2E/Bx—21 to 27 inches; very cobbly loamy sand

2B/Ex—27 to 43 inches; very cobbly sandy loam

2B/E—43 to 61 inches; very cobbly sandy loam

2C—61 to 80 inches; very cobbly loamy sand

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over cobbly and gravelly loamy and sandy till

Slope: 35 to 55 percent

Hazard of soil blowing: Slight

Surface runoff class: High

Potential for frost action: Moderate

Depth to restrictive feature: 21 inches to a fragipan

Drainage class: Well drained

Available water capacity: 4.7 inches (low)

Shrink-swell potential: Moderate

Permeability: Very slow

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7s

Michigan soil management group: 3a-af

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

311B—Tula-Gogebic complex, 0 to 6 percent slopes, stony

Setting

Landform: Till plains

Average Map Unit Composition

45 percent Tula and similar soils
40 percent Gogebic and similar soils
15 percent components of minor extent

Typical Profile

Tula

Oa—0 to 1 inch; highly decomposed plant material
A—1 to 5 inches; cobbly very fine sandy loam
E—5 to 8 inches; cobbly very fine sandy loam
Bs1—8 to 20 inches; cobbly very fine sandy loam
Bs2—20 to 28 inches; gravelly sandy loam
2E/Bx—28 to 37 inches; gravelly sandy loam
2B/Ex—37 to 62 inches; gravelly loam
2C—62 to 80 inches; gravelly sandy loam

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; silt loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
2C—68 to 80 inches; gravelly fine sandy loam

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till

Slope: Tula—0 to 2 percent; Gogebic—1 to 6 percent

Hazard of soil blowing: Tula—moderate; Gogebic—slight

Surface runoff class: Tula—low; Gogebic—medium

Potential for frost action: Tula—high; Gogebic—moderate

Depth to restrictive feature: Tula—28 inches to a fragipan; Gogebic—20 inches to a fragipan

Drainage class: Tula—somewhat poorly drained; Gogebic—moderately well drained

Available water capacity: Tula—7.2 inches (moderate); Gogebic—5.5 inches (low)

Shrink-swell potential: Moderate

Permeability: Very slow

Flooding: None

Depth to seasonal high water table: Tula—0.5 foot to 2.5 feet (April, May); Gogebic—1 to 2 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 2w

Michigan soil management group: Tula—3b-af; Gogebic—3a-af
Habitat type: Tula—ATD-CI; Gogebic—ATD

Major Uses

Dominant use: Forestland

Other uses: Cropland, pasture, recreation, wildlife habitat

**312A—Tula-Foxpaw-Gay complex, 0 to 4 percent slopes,
stony**

Setting

Landform: Till plains

Average Map Unit Composition

35 percent Tula and similar soils
30 percent Foxpaw and similar soils
25 percent Gay and similar soils
10 percent components of minor extent

Typical Profile

Tula

Oa—0 to 1 inch; highly decomposed plant material
A—1 to 5 inches; cobbly very fine sandy loam
E—5 to 8 inches; cobbly very fine sandy loam
Bs1—8 to 20 inches; cobbly very fine sandy loam
Bs2—20 to 28 inches; gravelly sandy loam
2E/Bx—28 to 37 inches; gravelly sandy loam
2B/Ex—37 to 62 inches; gravelly loam
2C—62 to 80 inches; gravelly sandy loam

Foxpaw

Oi—0 to 1 inch; slightly decomposed plant material
Oa—1 to 3 inches; muck
E—3 to 8 inches; cobbly loam
Bhs—8 to 15 inches; cobbly fine sandy loam
Bs—15 to 23 inches; gravelly fine sandy loam
BC—23 to 32 inches; sandy loam
C—32 to 80 inches; fine sandy loam

Gay

Oa—0 to 4 inches; muck
A—4 to 7 inches; fine sandy loam
Eg—7 to 11 inches; sandy loam
Bw—11 to 16 inches; sandy loam
BC—16 to 30 inches; sandy loam
C—30 to 80 inches; sandy loam

Soil Properties and Qualities

Parent material: Tula—modified loamy eolian deposits over loamy till; Foxpaw and
Gay—coarse-loamy till

Slope: Tula—0 to 4 percent; Foxpaw and Gay—0 to 2 percent

Hazard of soil blowing: Tula and Gay—moderate; Foxpaw—slight

Surface runoff class: Tula—low; Foxpaw and Gay—negligible

Potential for frost action: High

Soil Survey of Gogebic County, Michigan

Depth to restrictive feature: Tula—28 inches to a fragipan; Foxpaw and Gay—more than 80 inches

Drainage class: Tula—somewhat poorly drained; Foxpaw and Gay—poorly drained

Available water capacity: 7.2 to 8.2 inches (moderate)

Shrink-swell potential: Tula and Foxpaw—moderate; Gay—low

Permeability: Tula—very slow; Foxpaw—moderately rapid; Gay—moderate

Flooding: None

Depth to seasonal high water table: Tula—0.5 foot to 2.5 feet (April, May); Foxpaw and Gay—at the surface (January, February, March, April, May, October, November, December)

Depth and months of deepest ponding: Tula—none; Foxpaw and Gay—0.3 foot (March, April, May, October, November)

Months in which ponding does not occur: Foxpaw and Gay—January, February, June, July, August, September, December

Interpretive Groups

Land capability classification: 4w

Michigan soil management group: Tula—3b-af; Foxpaw and Gay—3c

Habitat type: Tula—TMC-D; Foxpaw and Gay—TMC

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

316—Gay loam, 0 to 1 percent slopes, stony

Setting

Landform: Depressions on till plains

Average Map Unit Composition

85 percent Gay and similar soils

15 percent components of minor extent

Typical Profile

Gay

A—0 to 7 inches; loam

Eg—7 to 11 inches; sandy loam

Bw—11 to 16 inches; sandy loam

BC—16 to 30 inches; sandy loam

C—30 to 80 inches; sandy loam

Soil Properties and Qualities

Parent material: Coarse-loamy till

Slope: 0 to 1 percent

Hazard of soil blowing: Moderate

Surface runoff class: Negligible

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Available water capacity: 8.1 inches (moderate)

Shrink-swell potential: Low

Permeability: Moderate

Flooding: None

Depth to seasonal high water table: At the surface (January, February, March, April, May, October, November, December)

Depth and months of deepest ponding: 0.3 foot (March, April, May, October, November)

Months in which ponding does not occur: January, February, June, July, August, September, December

Interpretive Groups

Land capability classification: 5w

Michigan soil management group: 3c

Habitat type: F1

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

317B—Gogebic silt loam, 1 to 6 percent slopes, stony

Setting

Landform: Till plains

Average Map Unit Composition

95 percent Gogebic and similar soils

5 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; silt loam

E—5 to 8 inches; silt loam

Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam

2E/Bx—20 to 33 inches; gravelly fine sandy loam

2B/Ex—33 to 49 inches; fine sandy loam

2Bt—49 to 54 inches; fine sandy loam

2BC—54 to 68 inches; fine sandy loam

2C—68 to 80 inches; gravelly fine sandy loam

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till

Slope: 1 to 6 percent

Hazard of soil blowing: Slight

Surface runoff class: Low

Potential for frost action: Moderate

Depth to restrictive feature: 20 inches to a fragipan

Drainage class: Moderately well drained

Available water capacity: 5.5 inches (low)

Shrink-swell potential: Moderate

Permeability: Very slow

Flooding: None

Depth to seasonal high water table: 1 to 2 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 4e

Michigan soil management group: 3a-af

Habitat type: AVO

Major Uses

Dominant use: Forestland

Other uses: Cropland, pasture, recreation, wildlife habitat

317C—Gogebic silt loam, 6 to 18 percent slopes, stony

Setting

Landform: Till plains

Average Map Unit Composition

90 percent Gogebic and similar soils

10 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; silt loam

E—5 to 8 inches; silt loam

Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam

2E/Bx—20 to 33 inches; gravelly fine sandy loam

2B/Ex—33 to 49 inches; fine sandy loam

2Bt—49 to 54 inches; fine sandy loam

2BC—54 to 68 inches; fine sandy loam

2C—68 to 80 inches; gravelly fine sandy loam

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till

Slope: 6 to 18 percent

Hazard of soil blowing: Slight

Surface runoff class: Medium

Potential for frost action: Moderate

Depth to restrictive feature: 20 inches to a fragipan

Drainage class: Moderately well drained

Available water capacity: 5.5 inches (low)

Shrink-swell potential: Moderate

Permeability: Very slow

Flooding: None

Depth to seasonal high water table: 1 to 2 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 6e

Michigan soil management group: 3a-af

Habitat type: AVO

Major Uses

Dominant use: Forestland

Other uses: Pasture, recreation, wildlife habitat

317D—Gogebic silt loam, 18 to 35 percent slopes, stony

Setting

Landform: Till plains

Average Map Unit Composition

88 percent Gogebic and similar soils

12 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; silt loam

E—5 to 8 inches; silt loam

Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam

2E/Bx—20 to 33 inches; gravelly fine sandy loam

2B/Ex—33 to 49 inches; fine sandy loam

2Bt—49 to 54 inches; fine sandy loam

2BC—54 to 68 inches; fine sandy loam

2C—68 to 80 inches; gravelly fine sandy loam

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till

Slope: 18 to 35 percent

Hazard of soil blowing: Slight

Surface runoff class: High

Potential for frost action: Moderate

Depth to restrictive feature: 20 inches to a fragipan

Drainage class: Moderately well drained

Available water capacity: 5.5 inches (low)

Shrink-swell potential: Moderate

Permeability: Very slow

Flooding: None

Depth to seasonal high water table: 1 to 2 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: 3a-af

Habitat type: AVO

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

319B—McMillan-Noseum complex, 1 to 6 percent slopes

Setting

Landform: Moraines; outwash plains

Average Map Unit Composition

45 percent McMillan and similar soils
40 percent Noseum and similar soils
15 percent components of minor extent

Typical Profile

McMillan

Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 2 inches; fine sandy loam
E—2 to 5 inches; fine sandy loam
Bhs—5 to 9 inches; fine sandy loam
Bs1—9 to 14 inches; fine sandy loam
Bs2—14 to 19 inches; fine sandy loam
Bw—19 to 29 inches; fine sand
E and Bt—29 to 72 inches; stratified sand to loamy fine sand
C—72 to 80 inches; stratified coarse sand to sand to loamy sand

Noseum

Oa—0 to 1 inch; highly decomposed plant material
E—1 to 4 inches; fine sandy loam
Bhs—4 to 6 inches; fine sandy loam
Bs1—6 to 14 inches; fine sandy loam
2Bs2—14 to 24 inches; loamy sand
2BC—24 to 37 inches; sand
2C1—37 to 63 inches; fine sand
2C2—63 to 80 inches; sand

Soil Properties and Qualities

Parent material: McMillan—loamy over sandy glaciofluvial deposits; Noseum—loamy outwash over sandy outwash

Slope: McMillan—1 to 6 percent; Noseum—1 to 4 percent

Hazard of soil blowing: McMillan—slight; Noseum—moderate

Surface runoff class: McMillan—low; Noseum—very low

Potential for frost action: Low

Depth to restrictive feature: More than 80 inches

Drainage class: McMillan—well drained; Noseum—moderately well drained

Available water capacity: McMillan—4 inches (low); Noseum—6.3 inches (moderate)

Shrink-swell potential: Low

Permeability: Moderately rapid

Flooding: None

Depth to seasonal high water table: McMillan—more than 6.5 feet; Noseum—2.0 to 6.7 feet (April, May)

Ponding: None

Interpretive Groups

Land capability classification: 2e

Michigan soil management group: McMillan—3a; Noseum—4a

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

319C—McMillan-Islandlake complex, 6 to 18 percent slopes

Setting

Landform: Moraines; outwash plains

Average Map Unit Composition

45 percent McMillan and similar soils

40 percent Islandlake and similar soils

15 percent components of minor extent

Typical Profile

McMillan

Oe—0 to 1 inch; moderately decomposed plant material

A—1 to 2 inches; fine sandy loam

E—2 to 5 inches; fine sandy loam

Bhs—5 to 9 inches; fine sandy loam

Bs1—9 to 14 inches; fine sandy loam

Bs2—14 to 19 inches; fine sandy loam

Bw—19 to 29 inches; fine sand

E and Bt—29 to 72 inches; stratified sand to loamy fine sand

C—72 to 80 inches; stratified coarse sand to sand to loamy sand

Islandlake

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 7 inches; sand

Bhs—7 to 9 inches; sand

Bs—9 to 35 inches; sand

E'—35 to 45 inches; sand

E and Bt—45 to 80 inches; stratified sand to loamy sand

Soil Properties and Qualities

Parent material: McMillan—loamy over sandy glaciofluvial deposits; Islandlake—sandy glaciofluvial deposits

Slope: 6 to 18 percent

Hazard of soil blowing: McMillan—slight; Islandlake—severe

Surface runoff class: McMillan—medium; Islandlake—very low

Potential for frost action: Low

Depth to restrictive feature: More than 80 inches

Drainage class: McMillan—well drained; Islandlake—somewhat excessively drained

Available water capacity: 4.0 to 4.7 inches (low)

Shrink-swell potential: McMillan—low; Islandlake—moderate

Permeability: McMillan—moderately rapid; Islandlake—rapid

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 4e

Michigan soil management group: McMillan—3a; Islandlake—5a

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

319D—McMillan-Islandlake complex, 18 to 35 percent slopes

Setting

Landform: Moraines; outwash plains

Average Map Unit Composition

45 percent McMillan and similar soils

40 percent Islandlake and similar soils

15 percent components of minor extent

Typical Profile

McMillan

Oe—0 to 1 inch; moderately decomposed plant material

A—1 to 2 inches; fine sandy loam

E—2 to 5 inches; fine sandy loam

Bhs—5 to 9 inches; fine sandy loam

Bs1—9 to 14 inches; fine sandy loam

Bs2—14 to 19 inches; fine sandy loam

Bw—19 to 29 inches; fine sand

E and Bt—29 to 72 inches; stratified sand to loamy fine sand

C—72 to 80 inches; stratified coarse sand to sand to loamy sand

Islandlake

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 7 inches; sand

Bhs—7 to 9 inches; sand

Bs—9 to 35 inches; sand

E'—35 to 45 inches; sand

E and Bt—45 to 80 inches; stratified sand to loamy sand

Soil Properties and Qualities

Parent material: McMillan—loamy over sandy glaciofluvial deposits; Islandlake—sandy glaciofluvial deposits

Slope: 18 to 35 percent

Hazard of soil blowing: McMillan—slight; Islandlake—severe

Surface runoff class: McMillan—high; Islandlake—low

Potential for frost action: Low

Depth to restrictive feature: More than 80 inches

Drainage class: McMillan—well drained; Islandlake—somewhat excessively drained

Available water capacity: 4.0 to 4.7 inches (low)

Shrink-swell potential: McMillan—low; Islandlake—moderate

Permeability: McMillan—moderately rapid; Islandlake—rapid

Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: McMillan—3a; Islandlake—5a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

319E—McMillan-Islandlake complex, 35 to 55 percent slopes

Setting

Landform: Moraines; end moraines

Average Map Unit Composition

45 percent McMillan and similar soils
40 percent Islandlake and similar soils
15 percent components of minor extent

Typical Profile

McMillan

Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 2 inches; fine sandy loam
E—2 to 5 inches; fine sandy loam
Bhs—5 to 9 inches; fine sandy loam
Bs1—9 to 14 inches; fine sandy loam
Bs2—14 to 19 inches; fine sandy loam
Bw—19 to 29 inches; fine sand
E and Bt—29 to 72 inches; stratified sand to loamy fine sand
C—72 to 80 inches; stratified coarse sand to sand to loamy sand

Islandlake

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 7 inches; sand
Bhs—7 to 9 inches; sand
Bs—9 to 35 inches; sand
E'—35 to 45 inches; sand
E and Bt—45 to 80 inches; stratified sand to loamy sand

Soil Properties and Qualities

Parent material: McMillan—loamy over sandy glaciofluvial deposits; Islandlake—sandy glaciofluvial deposits
Slope: 35 to 55 percent
Hazard of soil blowing: McMillan—slight; Islandlake—severe
Surface runoff class: McMillan—high; Islandlake—low
Potential for frost action: Low
Depth to restrictive feature: More than 80 inches

Drainage class: McMillan—well drained; Islandlake—somewhat excessively drained

Available water capacity: 4.0 to 4.7 inches (low)

Shrink-swell potential: McMillan—low; Islandlake—moderate

Permeability: McMillan—moderately rapid; Islandlake—rapid

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: McMillan—3a; Islandlake—5a

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

322B—Stutts-Keweenaw complex, 1 to 6 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

60 percent Stutts and similar soils

30 percent Keweenaw and similar soils

10 percent components of minor extent

Typical Profile

Stutts

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 6 inches; loamy fine sand

Bhs—6 to 8 inches; loamy fine sand

Bs1—8 to 15 inches; loamy fine sand

Bs2—15 to 18 inches; fine sand

BC—18 to 28 inches; fine sand

C—28 to 80 inches; fine sand

Keweenaw

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 4 inches; loamy sand

Bhs—4 to 6 inches; loamy fine sand

Bs—6 to 25 inches; loamy fine sand

E/B—25 to 45 inches; stratified sand to fine sand to loamy fine sand to loamy very fine sand

B/E—45 to 56 inches; stratified loamy fine sand to fine sand to fine sandy loam

E/B'—56 to 71 inches; stratified loamy fine sand to fine sand to fine sandy loam

B/E'—71 to 90 inches; stratified loamy fine sand to fine sandy loam

Soil Properties and Qualities

Parent material: Sandy glaciofluvial deposits

Slope: 1 to 6 percent

Hazard of soil blowing: Moderate

Surface runoff class: Low

Potential for frost action: Low

Depth to restrictive feature: More than 80 inches

Drainage class: Stutts—somewhat excessively drained; Keweenaw—well drained

Available water capacity: 3.7 to 4.5 inches (low)

Shrink-swell potential: Low

Permeability: Stutts—moderately rapid; Keweenaw—moderately slow

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 3s

Michigan soil management group: Stutts—4a; Keweenaw—4a-a

Habitat type: TM

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

322C—Stutts-Keweenaw complex, 6 to 18 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

60 percent Stutts and similar soils

30 percent Keweenaw and similar soils

10 percent components of minor extent

Typical Profile

Stutts

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 6 inches; loamy fine sand

Bhs—6 to 8 inches; loamy fine sand

Bs1—8 to 15 inches; loamy fine sand

Bs2—15 to 18 inches; fine sand

BC—18 to 28 inches; fine sand

C—28 to 80 inches; fine sand

Keweenaw

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 4 inches; loamy sand

Bhs—4 to 6 inches; loamy fine sand

Bs—6 to 25 inches; loamy fine sand

E/B—25 to 45 inches; stratified sand to fine sand to loamy fine sand to loamy very fine sand

B/E—45 to 56 inches; stratified loamy fine sand to fine sand to fine sandy loam

E/B'—56 to 71 inches; stratified loamy fine sand to fine sand to fine sandy loam

B/E'—71 to 90 inches; stratified loamy fine sand to fine sandy loam

Soil Properties and Qualities

Parent material: Sandy glaciofluvial deposits

Slope: 6 to 18 percent

Hazard of soil blowing: Moderate

Surface runoff class: Stutts—low; Keweenaw—medium

Potential for frost action: Low

Depth to restrictive feature: More than 80 inches

Drainage class: Stutts—somewhat excessively drained; Keweenaw—well drained

Available water capacity: 3.7 to 4.5 inches (low)

Shrink-swell potential: Low

Permeability: Stutts—moderately rapid; Keweenaw—moderately slow

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 4e

Michigan soil management group: Stutts—4a; Keweenaw—4a-a

Habitat type: TM

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

322D—Stutts-Keweenaw complex, 18 to 35 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

60 percent Stutts and similar soils

30 percent Keweenaw and similar soils

10 percent components of minor extent

Typical Profile

Stutts

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 6 inches; loamy fine sand

Bhs—6 to 8 inches; loamy fine sand

Bs1—8 to 15 inches; loamy fine sand

Bs2—15 to 18 inches; fine sand

BC—18 to 28 inches; fine sand

C—28 to 80 inches; fine sand

Keweenaw

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 4 inches; loamy sand

Bhs—4 to 6 inches; loamy fine sand

Bs—6 to 25 inches; loamy fine sand

E/B—25 to 45 inches; stratified sand to fine sand to loamy fine sand to loamy very fine sand

B/E—45 to 56 inches; stratified loamy fine sand to fine sand to fine sandy loam

E/B'—56 to 71 inches; stratified loamy fine sand to fine sand to fine sandy loam

B/E'—71 to 90 inches; stratified loamy fine sand to fine sandy loam

Soil Properties and Qualities

Parent material: Sandy glaciofluvial deposits

Slope: 18 to 35 percent

Hazard of soil blowing: Moderate

Surface runoff class: Stutts—medium; Keweenaw—high

Potential for frost action: Low

Depth to restrictive feature: More than 80 inches

Drainage class: Stutts—somewhat excessively drained; Keweenaw—well drained

Available water capacity: 3.7 to 4.5 inches (low)

Shrink-swell potential: Low

Permeability: Stutts—moderately rapid; Keweenaw—moderately slow

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: Stutts—4a; Keweenaw—4a-a

Habitat type: TM

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

323B—Keweenaw-Kalkaska complex, 1 to 6 percent slopes

Setting

Landform: Knolls, ridges, and hillslopes on ground moraines and stream terraces

Average Map Unit Composition

50 percent Keweenaw and similar soils

40 percent Kalkaska and similar soils

10 percent components of minor extent

Typical Profile

Keweenaw

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 4 inches; sandy loam

Bhs—4 to 6 inches; loamy fine sand

Bs—6 to 25 inches; loamy fine sand

E/B—25 to 45 inches; stratified sand to fine sand to loamy fine sand to loamy very fine sand

B/E—45 to 56 inches; stratified loamy fine sand to fine sand to fine sandy loam

E/B'—56 to 71 inches; stratified loamy fine sand to fine sand to fine sandy loam

B/E'—71 to 90 inches; stratified loamy fine sand to fine sandy loam

Kalkaska

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 6 inches; sand

Bhs—6 to 8 inches; sand

Bs—8 to 17 inches; sand

BC—17 to 32 inches; sand

C—32 to 80 inches; sand

Soil Properties and Qualities

Parent material: Keweenaw—sandy drift; Kalkaska—sandy outwash

Slope: 1 to 6 percent

Hazard of soil blowing: Keweenaw—moderate; Kalkaska—severe

Surface runoff class: Keweenaw—medium; Kalkaska—very low

Potential for frost action: Low

Depth to restrictive feature: More than 80 inches

Drainage class: Keweenaw—well drained; Kalkaska—somewhat excessively drained

Available water capacity: 3.7 to 4.5 inches (low)

Shrink-swell potential: Low

Permeability: Keweenaw—moderate; Kalkaska—rapid

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 2e

Michigan soil management group: Keweenaw—4a-a; Kalkaska—5a

Habitat type: Keweenaw—ATD; Kalkaska—ATD-D

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

323C—Keweenaw-Kalkaska complex, 6 to 18 percent slopes

Setting

Landform: Knolls, ridges, and hillslopes on ground moraine and stream terraces

Average Map Unit Composition

50 percent Keweenaw and similar soils

40 percent Kalkaska and similar soils

10 percent components of minor extent

Typical Profile

Keweenaw

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 4 inches; sandy loam

Bhs—4 to 6 inches; loamy fine sand

Bs—6 to 25 inches; loamy fine sand

E/B—25 to 45 inches; stratified sand to fine sand to loamy fine sand to loamy very fine sand

B/E—45 to 56 inches; stratified loamy fine sand to fine sand to fine sandy loam

E/B'—56 to 71 inches; stratified loamy fine sand to fine sand to fine sandy loam

B/E'—71 to 90 inches; stratified loamy fine sand to fine sandy loam

Kalkaska

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 6 inches; sand

Bhs—6 to 8 inches; sand

Bs—8 to 17 inches; sand

BC—17 to 32 inches; sand

C—32 to 80 inches; sand

Soil Properties and Qualities

Parent material: Keweenaw—sandy drift; Kalkaska—sandy outwash

Slope: 6 to 18 percent

Hazard of soil blowing: Keweenaw—moderate; Kalkaska—severe

Surface runoff class: Keweenaw—medium; Kalkaska—very low

Potential for frost action: Low

Depth to restrictive feature: More than 80 inches

Drainage class: Keweenaw—well drained; Kalkaska—somewhat excessively drained

Available water capacity: 3.7 to 4.5 inches (low)

Shrink-swell potential: Low

Permeability: Keweenaw—moderate; Kalkaska—rapid

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 4e

Michigan soil management group: Keweenaw—4a-a; Kalkaska—5a

Habitat type: Keweenaw—ATD; Kalkaska—ATD-D

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

323D—Keweenaw-Kalkaska complex, 18 to 35 percent slopes

Setting

Landform: Knolls, ridges, and hillslopes on ground moraines and stream terraces

Average Map Unit Composition

50 percent Keweenaw and similar soils

40 percent Kalkaska and similar soils

10 percent components of minor extent

Typical Profile

Keweenaw

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 4 inches; sandy loam

Bhs—4 to 6 inches; loamy fine sand

Bs—6 to 25 inches; loamy fine sand

E/B—25 to 45 inches; stratified sand to fine sand to loamy fine sand to loamy very fine sand

B/E—45 to 56 inches; stratified loamy fine sand to fine sand to fine sandy loam

E/B'—56 to 71 inches; stratified loamy fine sand to fine sand to fine sandy loam

B/E'—71 to 90 inches; stratified loamy fine sand to fine sandy loam

Kalkaska

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 6 inches; sand

Bhs—6 to 8 inches; sand
Bs—8 to 17 inches; sand
BC—17 to 32 inches; sand
C—32 to 80 inches; sand

Soil Properties and Qualities

Parent material: Keweenaw—sandy drift; Kalkaska—sandy outwash
Slope: 18 to 35 percent
Hazard of soil blowing: Keweenaw—moderate; Kalkaska—severe
Surface runoff class: Keweenaw—high; Kalkaska—low
Potential for frost action: Low
Depth to restrictive feature: More than 80 inches
Drainage class: Keweenaw—well drained; Kalkaska—somewhat excessively drained
Available water capacity: 3.7 to 4.5 inches (low)
Shrink-swell potential: Low
Permeability: Keweenaw—moderate; Kalkaska—rapid
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: Keweenaw—4a-a; Kalkaska—5a
Habitat type: Keweenaw—ATD; Kalkaska—ATD-D

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

325B—Siskiwit-Gogebic complex, 1 to 6 percent slopes, stony

Setting

Landform: Ground moraines

Average Map Unit Composition

55 percent Siskiwit and similar soils
45 percent Gogebic and similar soils

Typical Profile

Siskiwit

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 8 inches; loamy fine sand
Bhs—8 to 11 inches; loamy fine sand
Bs—11 to 28 inches; loamy fine sand
E/B—28 to 34 inches; loamy sand
B/E—34 to 55 inches; stratified sand to loamy sand
C—55 to 80 inches; stratified gravelly sand to sand to loamy sand

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; silt loam
E—5 to 8 inches; silt loam

Soil Survey of Gogebic County, Michigan

Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
2C—68 to 80 inches; gravelly fine sandy loam

Soil Properties and Qualities

Parent material: Siskiwit—sandy glaciofluvial deposits; Gogebic—modified loamy eolian deposits over loamy till
Slope: 1 to 6 percent
Hazard of soil blowing: Moderate
Surface runoff class: Medium
Potential for frost action: Siskiwit—low; Gogebic—moderate
Depth to restrictive feature: Siskiwit—more than 80 inches; Gogebic—20 inches to a fragipan
Drainage class: Siskiwit—somewhat poorly drained; Gogebic—moderately well drained
Available water capacity: Siskiwit—10 inches (high); Gogebic—5.5 inches (low)
Shrink-swell potential: Moderate
Permeability: Siskiwit—moderate; Gogebic—very slow
Flooding: None
Depth to seasonal high water table: Siskiwit—2.0 to 6.7 feet (April, May); Gogebic—1 to 2 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 2e
Michigan soil management group: Siskiwit—4b; Gogebic—3a-af
Habitat type: AVO

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

325C—Siskiwit-Gogebic complex, 6 to 18 percent slopes, stony

Setting

Landform: Ground moraines

Average Map Unit Composition

55 percent Siskiwit and similar soils
45 percent Gogebic and similar soils

Typical Profile

Siskiwit

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 8 inches; loamy fine sand
Bhs—8 to 11 inches; loamy fine sand
Bs—11 to 28 inches; loamy fine sand
E/B—28 to 34 inches; loamy sand

Soil Survey of Gogebic County, Michigan

B/E—34 to 55 inches; stratified sand to loamy sand

C—55 to 80 inches; stratified gravelly sand to sand to loamy sand

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; silt loam

E—5 to 8 inches; silt loam

Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam

2E/Bx—20 to 33 inches; gravelly fine sandy loam

2B/Ex—33 to 49 inches; fine sandy loam

2Bt—49 to 54 inches; fine sandy loam

2BC—54 to 68 inches; fine sandy loam

2C—68 to 80 inches; gravelly fine sandy loam

Soil Properties and Qualities

Parent material: Siskiwit—sandy glaciofluvial deposits; Gogebic—modified loamy eolian deposits over loamy till

Slope: 6 to 18 percent

Hazard of soil blowing: Moderate

Surface runoff class: Medium

Potential for frost action: Siskiwit—low; Gogebic—moderate

Depth to restrictive feature: Siskiwit—more than 80 inches; Gogebic—20 inches to a fragipan

Drainage class: Siskiwit—somewhat poorly drained; Gogebic—moderately well drained

Available water capacity: Siskiwit—10 inches (high); Gogebic—5.5 inches (low)

Shrink-swell potential: Moderate

Permeability: Siskiwit—moderate; Gogebic—very slow

Flooding: None

Depth to seasonal high water table: Siskiwit—2.0 to 6.7 feet (April, May); Gogebic—1 to 2 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 4e

Michigan soil management group: Siskiwit—4b; Gogebic—3a-af

Habitat type: AVO

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

327—Foxpaw-Sarwet complex, 0 to 1 percent slopes

Setting

Landform: Drainageways and depressions on till plains

Average Map Unit Composition

60 percent Foxpaw and similar soils

40 percent Sarwet and similar soils

Typical Profile

Foxpaw

Oi—0 to 1 inch; slightly decomposed plant material
Oa—1 to 3 inches; muck
E—3 to 8 inches; cobbly loam
Bhs—8 to 15 inches; cobbly fine sandy loam
Bs—15 to 23 inches; gravelly fine sandy loam
BC—23 to 32 inches; sandy loam
C—32 to 80 inches; fine sandy loam

Sarwet

Oi—0 to 2 inches; slightly decomposed plant material
Oa—2 to 3 inches; highly decomposed plant material
E—3 to 7 inches; fine sandy loam
Bhs—7 to 14 inches; fine sandy loam
Bs—14 to 22 inches; fine sandy loam
E/B—22 to 28 inches; loamy sand
B/E—28 to 38 inches; fine sandy loam
C1—38 to 47 inches; fine sand
2C2—47 to 50 inches; sandy clay loam
3C3—50 to 80 inches; loamy sand

Soil Properties and Qualities

Parent material: Coarse-loamy till

Slope: 0 to 1 percent

Hazard of soil blowing: Foxpaw—slight; Sarwet—moderate

Surface runoff class: Foxpaw—negligible; Sarwet—low

Potential for frost action: Foxpaw—high; Sarwet—moderate

Depth to restrictive feature: More than 80 inches

Drainage class: Foxpaw—poorly drained; Sarwet—moderately well drained

Available water capacity: 8.2 inches (moderate)

Shrink-swell potential: Moderate

Permeability: Foxpaw—moderately rapid; Sarwet—moderate

Flooding: None

Depth to seasonal high water table: Foxpaw—at the surface (January, February, March, April, May, October, November, December); Sarwet—2.0 to 6.7 feet (April, May)

Depth and months of deepest ponding: Foxpaw—0.3 foot (March, April, May, October, November); Sarwet—none

Months in which ponding does not occur: Foxpaw—January, February, June, July, August, September, December

Interpretive Groups

Land capability classification: 5w

Michigan soil management group: Foxpaw—3c; Sarwet—3a

Habitat type: Foxpaw—TMC; Sarwet—TMC-D

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

328B—Annalake-Karlin complex, 1 to 6 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

50 percent Annalake and similar soils
36 percent Karlin and similar soils
14 percent components of minor extent

Typical Profile

Annalake

Ap—0 to 9 inches; loam
Bs—9 to 16 inches; fine sandy loam
E and Bt1—16 to 31 inches; stratified loamy very fine sand to silt loam to loamy fine sand
E and Bt2—31 to 48 inches; stratified sand to fine sand to loamy fine sand to silt loam
Bt and E—48 to 61 inches; stratified sand to fine sand to loamy fine sand to silt loam
C—61 to 80 inches; stratified fine sand to loamy fine sand to silt loam to silt

Karlin

Oa—0 to 1 inch; highly decomposed plant material
E—1 to 4 inches; loamy fine sand
Bs—4 to 15 inches; sandy loam
2BC—15 to 29 inches; sand
2C—29 to 80 inches; sand

Soil Properties and Qualities

Parent material: Annalake—stratified loamy glaciofluvial deposits; Karlin—sandy glaciofluvial deposits
Slope: 1 to 6 percent
Hazard of soil blowing: Moderate
Surface runoff class: Annalake—low; Karlin—very low
Potential for frost action: Annalake—moderate; Karlin—low
Depth to restrictive feature: More than 80 inches
Drainage class: Annalake—moderately well drained; Karlin—somewhat excessively drained
Available water capacity: Annalake—8.8 inches (moderate); Karlin—5.8 inches (low)
Shrink-swell potential: Low
Permeability: Annalake—moderate; Karlin—moderately rapid
Flooding: None
Depth to seasonal high water table: Annalake—1.5 to 6.7 feet (April); Karlin—more than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 2e
Michigan soil management group: Annalake—3a-s; Karlin—4a
Habitat type: AVO

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

328C—Annalake-Karlin complex, 6 to 18 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

50 percent Annalake and similar soils
40 percent Karlin and similar soils
10 percent components of minor extent

Typical Profile

Annalake

Ap—0 to 9 inches; loam
Bs—9 to 16 inches; fine sandy loam
E and Bt1—16 to 31 inches; stratified loamy very fine sand to silt loam to loamy fine sand
E and Bt2—31 to 48 inches; stratified sand to fine sand to loamy fine sand to silt loam
Bt and E—48 to 61 inches; stratified sand to fine sand to loamy fine sand to silt loam
C—61 to 80 inches; stratified fine sand to loamy fine sand to silt loam to silt

Karlin

Oa—0 to 1 inch; highly decomposed plant material
E—1 to 4 inches; loamy fine sand
Bs—4 to 15 inches; sandy loam
2BC—15 to 29 inches; sand
2C—29 to 80 inches; sand

Soil Properties and Qualities

Parent material: Annalake—stratified loamy glaciofluvial deposits; Karlin—sandy glaciofluvial deposits
Slope: 6 to 18 percent
Hazard of soil blowing: Moderate
Surface runoff class: Annalake—medium; Karlin—low
Potential for frost action: Annalake—moderate; Karlin—low
Depth to restrictive feature: More than 80 inches
Drainage class: Annalake—moderately well drained; Karlin—somewhat excessively drained
Available water capacity: Annalake—8.8 inches (moderate); Karlin—5.8 inches (low)
Shrink-swell potential: Low
Permeability: Annalake—moderate; Karlin—moderately rapid
Flooding: None
Depth to seasonal high water table: Annalake—1.5 to 6.7 feet (April); Karlin—more than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 3e
Michigan soil management group: Annalake—3a-s; Karlin—4a
Habitat type: AVO

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

328D—Karlin-Zandi complex, 18 to 35 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

50 percent Karlin and similar soils
45 percent Zandi and similar soils
5 percent components of minor extent

Typical Profile

Karlin

Oa—0 to 1 inch; highly decomposed plant material
E—1 to 4 inches; loamy fine sand
Bs—4 to 15 inches; sandy loam
2BC—15 to 29 inches; sand
2C—29 to 80 inches; sand

Zandi

Oe—0 to 0.5 inch; moderately decomposed plant material
E—0.5 inch to 4 inches; loamy very fine sand
Bhs—4 to 6 inches; loamy very fine sand
Bs—6 to 34 inches; very fine sandy loam
E/B—34 to 42 inches; stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam
B/E—42 to 57 inches; stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam
E and Bt—57 to 80 inches; stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam

Soil Properties and Qualities

Parent material: Karlin—sandy flow till; Zandi—coarse-loamy glaciolacustrine deposits

Slope: 18 to 35 percent

Hazard of soil blowing: Moderate

Surface runoff class: Karlin—medium; Zandi—high

Potential for frost action: Karlin—low; Zandi—moderate

Depth to restrictive feature: More than 80 inches

Drainage class: Karlin—somewhat excessively drained; Zandi—well drained

Available water capacity: Karlin—5.8 inches (low); Zandi—8.5 inches (moderate)

Shrink-swell potential: Low

Permeability: Karlin—moderately rapid; Zandi—moderate

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: Karlin—4a; Zandi—3a-s

Habitat type: Karlin—AVO; Zandi—ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

329A—Tula silt loam, 0 to 4 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

90 percent Tula and similar soils
10 percent components of minor extent

Typical Profile

Tula

Oa—0 to 1 inch; highly decomposed plant material
A—1 to 5 inches; silt loam
E—5 to 8 inches; cobbly very fine sandy loam
Bs1—8 to 20 inches; cobbly very fine sandy loam
Bs2—20 to 28 inches; gravelly sandy loam
2E/Bx—28 to 37 inches; gravelly sandy loam
2B/Ex—37 to 62 inches; gravelly loam
2C—62 to 80 inches; gravelly sandy loam

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till
Slope: 0 to 4 percent
Hazard of soil blowing: Moderate
Surface runoff class: Low
Potential for frost action: High
Depth to restrictive feature: 28 inches to a fragipan
Drainage class: Somewhat poorly drained
Available water capacity: 7.2 inches (moderate)
Shrink-swell potential: Moderate
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: 0.5 foot to 2.5 feet (April, May)
Ponding: None

Interpretive Groups

Land capability classification: 2w
Michigan soil management group: 3b-af
Habitat type: AVO-CI

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

351B—Gogebic silt loam, 1 to 6 percent slopes, rocky, very stony

Setting

Landform: Till plains

Average Map Unit Composition

85 percent Gogebic and similar soils
15 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; silt loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
2C—68 to 80 inches; gravelly fine sandy loam

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till
Slope: 1 to 6 percent
Hazard of soil blowing: Slight
Surface runoff class: Medium
Potential for frost action: Moderate
Depth to restrictive feature: 20 inches to a fragipan
Drainage class: Moderately well drained
Available water capacity: 5.5 inches (low)
Shrink-swell potential: Moderate
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: 1 to 2 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 6s
Michigan soil management group: 3a-af
Habitat type: AVO

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

351C—Gogebic silt loam, 6 to 18 percent slopes, rocky, very stony

Setting

Landform: Till plains

Average Map Unit Composition

85 percent Gogebic and similar soils
15 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; silt loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
2C—68 to 80 inches; gravelly fine sandy loam

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till
Slope: 6 to 18 percent
Hazard of soil blowing: Slight
Surface runoff class: Medium
Potential for frost action: Moderate
Depth to restrictive feature: 20 inches to a fragipan
Drainage class: Moderately well drained
Available water capacity: 5.5 inches (low)
Shrink-swell potential: Moderate
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: 1 to 2 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 6s
Michigan soil management group: 3a-af
Habitat type: AVO

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

**351D—Gogebic silt loam, 18 to 35 percent slopes, rocky,
very stony**

Setting

Landform: Till plains

Average Map Unit Composition

85 percent Gogebic and similar soils
15 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; silt loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
2C—68 to 80 inches; gravelly fine sandy loam

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till
Slope: 18 to 35 percent
Hazard of soil blowing: Slight
Surface runoff class: High
Potential for frost action: Moderate
Depth to restrictive feature: 20 inches to a fragipan
Drainage class: Moderately well drained
Available water capacity: 5.5 inches (low)
Shrink-swell potential: Moderate
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: 1 to 2 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: 3a-af
Habitat type: AVO

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

351E—Schweitzer silt loam, 35 to 55 percent slopes, rocky, very stony

Setting

Landform: Moraines

Average Map Unit Composition

85 percent Schweitzer and similar soils
15 percent components of minor extent

Typical Profile

Schweitzer

A—0 to 1 inch; silt loam
E—1 to 5 inches; cobbly silt loam
Bhs—5 to 8 inches; cobbly very fine sandy loam
Bs—8 to 21 inches; cobbly very fine sandy loam
2E/Bx—21 to 27 inches; very cobbly loamy sand
2B/Ex—27 to 43 inches; very cobbly sandy loam
2B/E—43 to 61 inches; very cobbly sandy loam
2C—61 to 80 inches; very cobbly loamy sand

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over cobbly and gravelly loamy and sandy till
Slope: 35 to 55 percent
Hazard of soil blowing: Slight
Surface runoff class: High
Potential for frost action: Moderate

Depth to restrictive feature: 21 inches to a fragipan
Drainage class: Well drained
Available water capacity: 4.7 inches (low)
Shrink-swell potential: Moderate
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7s
Michigan soil management group: 3a-af
Habitat type: AVO

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

351F—Schweitzer silt loam, 55 to 75 percent slopes, rocky, very stony

Setting

Landform: Moraines

Average Map Unit Composition

90 percent Schweitzer and similar soils
10 percent components of minor extent

Typical Profile

Schweitzer

A—0 to 1 inch; silt loam
E—1 to 5 inches; cobbly silt loam
Bhs—5 to 8 inches; cobbly very fine sandy loam
Bs—8 to 21 inches; cobbly very fine sandy loam
2E/Bx—21 to 27 inches; very cobbly loamy sand
2B/Ex—27 to 43 inches; very cobbly sandy loam
2B/E—43 to 61 inches; very cobbly sandy loam
2C—61 to 80 inches; very cobbly loamy sand

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over cobbly and gravelly loamy and sandy till
Slope: 55 to 75 percent
Hazard of soil blowing: Slight
Surface runoff class: High
Potential for frost action: Moderate
Depth to restrictive feature: 21 inches to a fragipan
Drainage class: Well drained
Available water capacity: 4.7 inches (low)
Shrink-swell potential: Moderate
Permeability: Very slow
Flooding: None

Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7s
Michigan soil management group: 3a-af
Habitat type: AVO

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

353A—Tula fine sandy loam, 0 to 4 percent slopes, stony

Setting

Landform: Till plains

Average Map Unit Composition

85 percent Tula and similar soils
15 percent components of minor extent

Typical Profile

Tula

Oa—0 to 1 inch; highly decomposed plant material
A—1 to 5 inches; fine sandy loam
E—5 to 8 inches; cobbly very fine sandy loam
Bs1—8 to 20 inches; cobbly very fine sandy loam
Bs2—20 to 28 inches; gravelly sandy loam
2E/Bx—28 to 37 inches; gravelly sandy loam
2B/Ex—37 to 62 inches; gravelly loam
2C—62 to 80 inches; gravelly sandy loam

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till
Slope: 0 to 4 percent
Hazard of soil blowing: Moderate
Surface runoff class: Low
Potential for frost action: High
Depth to restrictive feature: 28 inches to a fragipan
Drainage class: Somewhat poorly drained
Available water capacity: 7.2 inches (moderate)
Shrink-swell potential: Moderate
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: 0.5 foot to 2.5 feet (April, May)
Ponding: None

Interpretive Groups

Land capability classification: 4w
Michigan soil management group: 3b-af
Habitat type: ATD-CI

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

**354B—Gogebic fine sandy loam, 1 to 6 percent slopes,
rocky, very stony**

Setting

Landform: Till plains

Average Map Unit Composition

90 percent Gogebic and similar soils

10 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; fine sandy loam

E—5 to 8 inches; silt loam

Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam

2E/Bx—20 to 33 inches; gravelly fine sandy loam

2B/Ex—33 to 49 inches; fine sandy loam

2Bt—49 to 54 inches; fine sandy loam

2BC—54 to 68 inches; fine sandy loam

2C—68 to 80 inches; gravelly fine sandy loam

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till

Slope: 1 to 6 percent

Hazard of soil blowing: Slight

Surface runoff class: Medium

Potential for frost action: Moderate

Depth to restrictive feature: 20 inches to a fragipan

Drainage class: Moderately well drained

Available water capacity: 5.5 inches (low)

Shrink-swell potential: Moderate

Permeability: Very slow

Flooding: None

Depth to seasonal high water table: 1 to 2 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 6s

Michigan soil management group: 3a-af

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

**354C—Gogebic fine sandy loam, 6 to 18 percent slopes,
rocky, very stony**

Setting

Landform: Till plains

Average Map Unit Composition

90 percent Gogebic and similar soils
10 percent components of minor extent

Typical Profile

Gogebic

O_i—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; fine sandy loam
E—5 to 8 inches; silt loam
B_{hs}—8 to 12 inches; silt loam
B_s—12 to 20 inches; fine sandy loam
2E/B_x—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2B_t—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
2C—68 to 80 inches; gravelly fine sandy loam

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till
Slope: 6 to 18 percent
Hazard of soil blowing: Slight
Surface runoff class: Medium
Potential for frost action: Moderate
Depth to restrictive feature: 20 inches to a fragipan
Drainage class: Moderately well drained
Available water capacity: 5.5 inches (low)
Shrink-swell potential: Moderate
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: 1 to 2 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 6s
Michigan soil management group: 3a-af
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

**354D—Gogebic fine sandy loam, 18 to 35 percent slopes,
rocky, very stony**

Setting

Landform: Till plains

Average Map Unit Composition

85 percent Gogebic and similar soils
15 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; fine sandy loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
2C—68 to 80 inches; gravelly fine sandy loam

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till
Slope: 18 to 35 percent
Hazard of soil blowing: Slight
Surface runoff class: High
Potential for frost action: Moderate
Depth to restrictive feature: 20 inches to a fragipan
Drainage class: Moderately well drained
Available water capacity: 5.5 inches (low)
Shrink-swell potential: Moderate
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: 1 to 2 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: 3a-af
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

354E—Schweitzer fine sandy loam, 35 to 55 percent slopes, rocky, very stony

Setting

Landform: Moraines

Average Map Unit Composition

85 percent Schweitzer and similar soils
15 percent components of minor extent

Typical Profile

Schweitzer

A—0 to 1 inch; fine sandy loam
E—1 to 5 inches; cobbly silt loam
Bhs—5 to 8 inches; cobbly very fine sandy loam
Bs—8 to 21 inches; cobbly very fine sandy loam
2E/Bx—21 to 27 inches; very cobbly loamy sand
2B/Ex—27 to 43 inches; very cobbly sandy loam
2B/E—43 to 61 inches; very cobbly sandy loam
2C—61 to 80 inches; very cobbly loamy sand

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over cobbly and gravelly loamy and sandy till
Slope: 35 to 55 percent
Hazard of soil blowing: Slight
Surface runoff class: High
Potential for frost action: Moderate
Depth to restrictive feature: 21 inches to a fragipan
Drainage class: Well drained
Available water capacity: 4.7 inches (low)
Shrink-swell potential: Moderate
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7s
Michigan soil management group: 3a-af
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

354F—Schweitzer fine sandy loam, 55 to 70 percent slopes, rocky, very stony

Setting

Landform: Moraines

Average Map Unit Composition

90 percent Schweitzer and similar soils
10 percent components of minor extent

Typical Profile

Schweitzer

A—0 to 1 inch; fine sandy loam
E—1 to 5 inches; cobbly silt loam
Bhs—5 to 8 inches; cobbly very fine sandy loam
Bs—8 to 21 inches; cobbly very fine sandy loam

2E/Bx—21 to 27 inches; very cobbly loamy sand
2B/Ex—27 to 43 inches; very cobbly sandy loam
2B/E—43 to 61 inches; very cobbly sandy loam
2C—61 to 80 inches; very cobbly loamy sand

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over cobbly and gravelly loamy and sandy till
Slope: 55 to 70 percent
Hazard of soil blowing: Slight
Surface runoff class: High
Potential for frost action: Moderate
Depth to restrictive feature: 21 inches to a fragipan
Drainage class: Well drained
Available water capacity: 4.7 inches (low)
Shrink-swell potential: Moderate
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7s
Michigan soil management group: 3a-af
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

363C—Talus-Arcadian complex, 6 to 18 percent slopes, very rocky

Setting

Landform: Hillsides

Average Map Unit Composition

50 percent talus
35 percent Arcadian and similar soils
15 percent components of minor extent

Typical Profile

Arcadian

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 5 inches; very gravelly fine sandy loam
Bhs—5 to 12 inches; very gravelly fine sandy loam
2R—12 inches; unweathered bedrock

Definition of Talus

- Talus consists of rock fragments of any size or shape (commonly coarse and angular) derived from and lying at the base of a cliff or very steep rock slope. The accumulated mass of such loose broken rock formed chiefly by falling, rolling, or sliding.

Properties and Qualities of the Arcadian Soil

Parent material: Loamy-skeletal drift over conglomerate and/or basalt
Slope: 6 to 18 percent
Hazard of soil blowing: Slight
Surface runoff class: Medium
Potential for frost action: Moderate
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Well drained
Available water capacity: 1.7 inches (very low)
Shrink-swell potential: Low
Permeability: Moderate
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 8s
Michigan soil management group: Talus—none assigned; Arcadian—Ra
Habitat type: Talus—none assigned; Arcadian—AVO

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

**363D—Talus-Arcadian complex, 18 to 35 percent slopes,
very rocky**

Setting

Landform: Hillsides

Average Map Unit Composition

50 percent talus
35 percent Arcadian and similar soils
15 percent components of minor extent

Typical Profile

Arcadian

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 5 inches; very gravelly fine sandy loam
Bhs—5 to 12 inches; very gravelly fine sandy loam
2R—12 inches; unweathered bedrock

Definition of Talus

- Talus consists of rock fragments of any size or shape (commonly coarse and angular) derived from and lying at the base of a cliff or very steep rock slope. The accumulated mass of such loose broken rock formed chiefly by falling, rolling, or sliding.

Properties and Qualities of the Arcadian Soil

Parent material: Loamy-skeletal drift over conglomerate and/or basalt
Slope: 18 to 35 percent
Hazard of soil blowing: Slight

Surface runoff class: High
Potential for frost action: Moderate
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Well drained
Available water capacity: 1.7 inches (very low)
Shrink-swell potential: Low
Permeability: Moderate
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 8s
Michigan soil management group: Talus—none assigned; Arcadian—Ra
Habitat type: Talus—none assigned; Arcadian—AVO

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

363E—Talus-Arcadian complex, 35 to 55 percent slopes, very rocky

Setting

Landform: Hillsides

Average Map Unit Composition

50 percent talus
35 percent Arcadian and similar soils
15 percent components of minor extent

Typical Profile

Arcadian

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 5 inches; very gravelly fine sandy loam
Bhs—5 to 12 inches; very gravelly fine sandy loam
2R—12 inches; unweathered bedrock

Definition of Talus

- Talus consists of rock fragments of any size or shape (commonly coarse and angular) derived from and lying at the base of a cliff or very steep rock slope. The accumulated mass of such loose broken rock formed chiefly by falling, rolling, or sliding.

Properties and Qualities of the Arcadian Soil

Parent material: Loamy-skeletal drift over conglomerate and/or basalt
Slope: 35 to 55 percent
Hazard of soil blowing: Slight
Surface runoff class: High
Potential for frost action: Moderate
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Well drained
Available water capacity: 1.7 inches (very low)

Shrink-swell potential: Low

Permeability: Moderate

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 8s

Michigan soil management group: Talus—none assigned; Arcadian—Ra

Habitat type: Talus—none assigned; Arcadian—AVO

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

363F—Talus-Arcadian complex, 55 to 75 percent slopes, very rocky

Setting

Landform: Hillsides

Average Map Unit Composition

50 percent talus

35 percent Arcadian and similar soils

15 percent components of minor extent

Typical Profile

Arcadian

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 5 inches; very gravelly fine sandy loam

Bhs—5 to 12 inches; very gravelly fine sandy loam

2R—12 inches; unweathered bedrock

Definition of Talus

- Talus consists of rock fragments of any size or shape (commonly coarse and angular) derived from and lying at the base of a cliff or very steep rock slope. The accumulated mass of such loose broken rock formed chiefly by falling, rolling, or sliding.

Properties and Qualities of the Arcadian Soil

Parent material: Loamy-skeletal drift over conglomerate and/or basalt

Slope: 55 to 75 percent

Hazard of soil blowing: Slight

Surface runoff class: High

Potential for frost action: Moderate

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Well drained

Available water capacity: 1.7 inches (very low)

Shrink-swell potential: Low

Permeability: Moderate

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 8s

Michigan soil management group: Talus—none assigned; Arcadian—Ra

Habitat type: Talus—none assigned; Arcadian—AVO

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

364F—Talus, 35 to 75 percent slopes

Setting

Landform: Hillsides

Average Map Unit Composition

91 percent talus

9 percent components of minor extent

Definition of Talus

- Talus consists of rock fragments of any size or shape (commonly coarse and angular) derived from and lying at the base of a cliff or very steep rock slope. The accumulated mass of such loose broken rock formed chiefly by falling, rolling, or sliding.

Major Uses

Dominant uses: Recreation, wildlife habitat

365F—Rock outcrop, 75 to 100 percent slopes

Average Map Unit Composition

90 percent Rock outcrop

10 percent components of minor extent

Interpretive Groups

Land capability classification: 8s

Michigan soil management group: None assigned

Habitat type: None assigned

Major Uses

Dominant uses: Recreation, wildlife habitat

**369C—Dishno-Gogebic-Peshekee-Rock outcrop complex,
6 to 18 percent slopes, very stony**

Setting

Landform: Moraines

Average Map Unit Composition

35 percent Dishno and similar soils

30 percent Gogebic and similar soils

Soil Survey of Gogebic County, Michigan

15 percent Peshekee and similar soils
13 percent Rock outcrop
7 percent components of minor extent

Typical Profile

Dishno

Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 3 inches; cobbly silt loam
E—3 to 9 inches; cobbly silt loam
Bhs—9 to 10 inches; cobbly loam
Bs1—10 to 18 inches; cobbly fine sandy loam
Bs2—18 to 22 inches; cobbly loamy sand
2BC—22 to 29 inches; very stony loamy sand
2C—29 to 46 inches; very stony loamy sand
3R—46 inches; bedrock

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; silt loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
2C—68 to 80 inches; gravelly fine sandy loam

Peshekee

Oe—0 to 1 inch; mucky peat
A—1 to 4 inches; cobbly silt loam
E—4 to 6 inches; cobbly silt loam
Bhs—6 to 9 inches; cobbly silt loam
Bs—9 to 19 inches; cobbly fine sandy loam
2R—19 inches; bedrock

Soil Properties and Qualities

Parent material: Dishno—silty or loamy eolian deposits over sandy and gravelly till;

Gogebic—modified loamy eolian deposits over loamy till; Peshekee—loamy till

Slope: 6 to 18 percent

Hazard of soil blowing: Dishno—moderate; Gogebic and Peshekee—slight

Surface runoff class: Dishno—low; Gogebic and Peshekee—medium

Potential for frost action: Moderate

Depth to restrictive feature: Dishno—46 inches to lithic bedrock; Gogebic—20 inches to a fragipan; Peshekee—19 inches to lithic bedrock

Drainage class: Dishno and Gogebic—moderately well drained; Peshekee—well drained

Available water capacity: 3.1 to 5.5 inches (low)

Shrink-swell potential: Dishno and Peshekee—low; Gogebic—moderate

Permeability: Dishno and Peshekee—moderate; Gogebic—very slow

Flooding: None

Depth to seasonal high water table: Dishno—1.0 to 3.8 feet (April, October);

Gogebic—1 to 2 feet (April); Peshekee—more than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 6s

Michigan soil management group: Dishno—3a; Gogebic—3a-af; Peshekee—Ra;

Rock outcrop—none assigned

Habitat type: Dishno—ATD; Gogebic—AVO; Peshekee—TMV; Rock outcrop—none assigned

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

369D—Dishno-Gogebic-Peshekee-Rock outcrop complex, 18 to 35 percent slopes, very stony

Setting

Landform: Moraines

Average Map Unit Composition

35 percent Dishno and similar soils

30 percent Gogebic and similar soils

17 percent Peshekee and similar soils

13 percent Rock outcrop

5 percent components of minor extent

Typical Profile

Dishno

Oe—0 to 1 inch; moderately decomposed plant material

A—1 to 3 inches; cobbly silt loam

E—3 to 9 inches; cobbly silt loam

Bhs—9 to 10 inches; cobbly loam

Bs1—10 to 18 inches; cobbly fine sandy loam

Bs2—18 to 22 inches; cobbly loamy sand

2BC—22 to 29 inches; very stony loamy sand

2C—29 to 46 inches; very stony loamy sand

3R—46 inches; bedrock

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; silt loam

E—5 to 8 inches; silt loam

Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam

2E/Bx—20 to 33 inches; gravelly fine sandy loam

2B/Ex—33 to 49 inches; fine sandy loam

2Bt—49 to 54 inches; fine sandy loam

2BC—54 to 68 inches; fine sandy loam

2C—68 to 80 inches; gravelly fine sandy loam

Peshekee

Oe—0 to 1 inch; mucky peat

A—1 to 4 inches; cobbly silt loam

E—4 to 6 inches; cobbly silt loam

Bhs—6 to 9 inches; cobbly silt loam

Bs—9 to 19 inches; cobbly fine sandy loam
2R—19 inches; bedrock

Soil Properties and Qualities

Parent material: Dishno—silty or loamy eolian deposits over sandy and gravelly till;
Gogebic—modified loamy eolian deposits over loamy till; Peshekee—loamy till
Slope: 18 to 35 percent
Hazard of soil blowing: Dishno—moderate; Gogebic and Peshekee—slight
Surface runoff class: Dishno—medium; Gogebic and Peshekee—high
Potential for frost action: Moderate
Depth to restrictive feature: Dishno—46 inches to lithic bedrock; Gogebic—20 inches
to a fragipan; Peshekee—19 inches to lithic bedrock
Drainage class: Dishno and Gogebic—moderately well drained; Peshekee—well
drained
Available water capacity: 3.1 to 5.5 inches (low)
Shrink-swell potential: Dishno and Peshekee—low; Gogebic—moderate
Permeability: Dishno and Peshekee—moderate; Gogebic—very slow
Flooding: None
Depth to seasonal high water table: Dishno—1.0 to 3.8 feet (April, October);
Gogebic—1 to 2 feet (April); Peshekee—more than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: Dishno—3a; Gogebic—3a-af; Peshekee—Ra;
Rock outcrop—none assigned
Habitat type: Dishno—ATD; Gogebic—AVO; Peshekee—TMV; Rock outcrop—none
assigned

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

369E—Michigamme-Schweitzer-Peshekee-Rock outcrop complex, 35 to 55 percent slopes, very stony

Setting

Landform: Hills; ridges; moraines

Average Map Unit Composition

30 percent Michigamme and similar soils
25 percent Schweitzer and similar soils
20 percent Peshekee and similar soils
15 percent Rock outcrop
10 percent components of minor extent

Typical Profile

Michigamme

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; cobbly silt loam
E—2 to 4 inches; cobbly silt loam
Bhs—4 to 7 inches; silt loam

Soil Survey of Gogebic County, Michigan

Bs1—7 to 14 inches; silt loam
Bs2—14 to 20 inches; silt loam
Bs3—20 to 24 inches; very cobbly silt loam
2Bx—24 to 31 inches; very cobbly fine sandy loam
3R—31 inches; bedrock

Schweitzer

A—0 to 1 inch; cobbly very fine sandy loam
E—1 to 5 inches; cobbly silt loam
Bhs—5 to 8 inches; cobbly very fine sandy loam
Bs—8 to 21 inches; cobbly very fine sandy loam
2E/Bx—21 to 27 inches; very cobbly loamy sand
2B/Ex—27 to 43 inches; very cobbly sandy loam
2B/E—43 to 61 inches; very cobbly sandy loam
2C—61 to 80 inches; very cobbly loamy sand

Peshekee

Oe—0 to 1 inch; very cobbly moderately decomposed plant material
A—1 to 4 inches; cobbly silt loam
E—4 to 6 inches; cobbly silt loam
Bhs—6 to 9 inches; cobbly silt loam
Bs—9 to 19 inches; cobbly fine sandy loam
2R—19 inches; bedrock

Soil Properties and Qualities

Parent material: Michigamme—silty or loamy material over loamy till; Schweitzer—modified loamy eolian deposits over cobbly and gravelly loamy and sandy till; Peshekee—loamy till

Slope: 35 to 55 percent

Hazard of soil blowing: Slight

Surface runoff class: High

Potential for frost action: Moderate

Depth to restrictive feature: Michigamme—31 inches to lithic bedrock; Schweitzer—21 inches to a fragipan; Peshekee—19 inches to lithic bedrock

Drainage class: Well drained

Available water capacity: Michigamme and Schweitzer—4.8 to 5.0 inches (low); Peshekee—3 inches (very low)

Shrink-swell potential: Moderate

Permeability: Michigamme and Peshekee—moderate; Schweitzer—very slow

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7s

Michigan soil management group: Michigamme—3/Ra; Schweitzer—3a-af; Peshekee—Ra; Rock outcrop—none assigned

Habitat type: Michigamme—ATD; Schweitzer—AVO; Peshekee—TMV; Rock outcrop—none assigned

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

369F—Michigamme-Schweitzer-Peshekee-Rock outcrop complex, 55 to 75 percent slopes, very stony

Setting

Landform: Hills; ridges; moraines

Average Map Unit Composition

30 percent Michigamme and similar soils
25 percent Schweitzer and similar soils
20 percent Peshekee and similar soils
15 percent Rock outcrop
10 percent components of minor extent

Typical Profile

Michigamme

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; cobbly silt loam
E—2 to 4 inches; cobbly silt loam
Bhs—4 to 7 inches; silt loam
Bs1—7 to 14 inches; silt loam
Bs2—14 to 20 inches; silt loam
Bs3—20 to 24 inches; very cobbly silt loam
2Bx—24 to 31 inches; very cobbly fine sandy loam
3R—31 inches; bedrock

Schweitzer

A—0 to 1 inch; cobbly very fine sandy loam
E—1 to 5 inches; cobbly silt loam
Bhs—5 to 8 inches; cobbly very fine sandy loam
Bs—8 to 21 inches; cobbly very fine sandy loam
2E/Bx—21 to 27 inches; very cobbly loamy sand
2B/Ex—27 to 43 inches; very cobbly sandy loam
2B/E—43 to 61 inches; very cobbly sandy loam
2C—61 to 80 inches; very cobbly loamy sand

Peshekee

Oe—0 to 1 inch; very cobbly moderately decomposed plant material
A—1 to 4 inches; cobbly silt loam
E—4 to 6 inches; cobbly silt loam
Bhs—6 to 9 inches; cobbly silt loam
Bs—9 to 19 inches; cobbly fine sandy loam
2R—19 inches; bedrock

Soil Properties and Qualities

Parent material: Michigamme—silty or loamy material over loamy till; Schweitzer—modified loamy eolian deposits over cobbly and gravelly loamy and sandy till; Peshekee—loamy till

Slope: 55 to 75 percent

Hazard of soil blowing: Slight

Surface runoff class: High

Potential for frost action: Moderate

Depth to restrictive feature: Michigamme—31 inches to lithic bedrock; Schweitzer—21 inches to a fragipan; Peshekee—19 inches to lithic bedrock

Drainage class: Well drained

Available water capacity: Michigamme and Schweitzer—4.8 to 5.0 inches (low);
Peshekee—3 inches (very low)

Shrink-swell potential: Moderate

Permeability: Michigamme and Peshekee—moderate; Schweitzer—very slow

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7s

Michigan soil management group: Michigamme—3/Ra; Schweitzer—3a-af;
Peshekee—Ra; Rock outcrop—none assigned

Habitat type: Michigamme—ATD; Schweitzer—AVO; Peshekee—TMV; Rock
outcrop—none assigned

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

370E—Peshekee-Rock outcrop complex, 35 to 55 percent slopes, very stony

Setting

Landform: Hills; ridges

Average Map Unit Composition

55 percent Peshekee and similar soils

40 percent Rock outcrop

5 percent components of minor extent

Typical Profile

Peshekee

Oe—0 to 1 inch; very cobbly moderately decomposed plant material

A—1 to 4 inches; cobbly silt loam

E—4 to 6 inches; cobbly silt loam

Bhs—6 to 9 inches; cobbly silt loam

Bs—9 to 19 inches; cobbly fine sandy loam

2R—19 inches; bedrock

Soil Properties and Qualities

Parent material: Loamy till

Slope: 35 to 55 percent

Hazard of soil blowing: Slight

Surface runoff class: High

Potential for frost action: Moderate

Depth to restrictive feature: 19 inches to lithic bedrock

Drainage class: Well drained

Available water capacity: 3 inches (very low)

Shrink-swell potential: Low

Permeability: Moderate

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7s

Michigan soil management group: Peshekee—Ra; Rock outcrop—none assigned

Habitat type: Peshekee—TMV; Rock outcrop—none assigned

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

370F—Peshekee-Rock outcrop complex, 55 to 75 percent slopes, very stony

Setting

Landform: Hills; ridges

Average Map Unit Composition

55 percent Peshekee and similar soils

40 percent Rock outcrop

5 percent components of minor extent

Typical Profile

Peshekee

Oe—0 to 1 inch; very cobbly moderately decomposed plant material

A—1 to 4 inches; cobbly silt loam

E—4 to 6 inches; cobbly silt loam

Bhs—6 to 9 inches; cobbly silt loam

Bs—9 to 19 inches; cobbly fine sandy loam

2R—19 inches; bedrock

Soil Properties and Qualities

Parent material: Loamy till

Slope: 55 to 75 percent

Hazard of soil blowing: Slight

Surface runoff class: High

Potential for frost action: Moderate

Depth to restrictive feature: 19 inches to lithic bedrock

Drainage class: Well drained

Available water capacity: 3 inches (very low)

Shrink-swell potential: Low

Permeability: Moderate

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7s

Michigan soil management group: Peshekee—Ra; Rock outcrop—none assigned

Habitat type: Peshekee—TMV; Rock outcrop—none assigned

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

375—Dumps and Pits, mine

Average Map Unit Composition

95 percent Dumps and Pits, mine
5 percent components of minor extent

Interpretive Groups

Land capability classification: None assigned
Michigan soil management group: None assigned
Habitat type: None assigned

Major Uses

Dominant use: Dumps
Other uses: Pits
Note: Onsite investigation is needed to determine the suitability for specific uses.

380—Beseman and Greenwood soils, 0 to 1 percent slopes

Setting

Landform: Depressions on till plains

Average Map Unit Composition

0 to 100 percent Beseman and similar soils
0 to 100 percent Greenwood and similar soils
0 to 5 percent components of minor extent

Typical Profile

Beseman

Oe—0 to 2 inches; mucky peat
Oi—2 to 9 inches; peat
Oa1—9 to 28 inches; muck
Oa2—28 to 35 inches; muck
Oa3—35 to 44 inches; muck
Ab—44 to 47 inches; loam
Eb—47 to 57 inches; silt loam
Bw—57 to 67 inches; silt loam
C—67 to 80 inches; silt loam

Greenwood

Oi—0 to 8 inches; peat
Oa—8 to 11 inches; muck
Oe1—11 to 65 inches; mucky peat
Oe2—65 to 80 inches; mucky peat

Soil Properties and Qualities

Parent material: Beseman—highly decomposed organic material over loamy glaciofluvial deposits; Greenwood—herbaceous material
Slope: 0 to 1 percent
Hazard of soil blowing: Slight
Surface runoff class: Negligible
Potential for frost action: High
Depth to restrictive feature: More than 80 inches

Soil Survey of Gogebic County, Michigan

Drainage class: Very poorly drained

Available water capacity: 22.4 to 31.8 inches (very high)

Shrink-swell potential: Beseman—moderate; Greenwood—low

Permeability: Beseman—moderate; Greenwood—moderately rapid

Flooding: None

Depth to seasonal high water table: At the surface (January, February, March, April, May, June, September, October, November, December)

Depth and months of deepest ponding: Beseman—0.5 foot (January, February, March, April, May, June, September, October, November, December); Greenwood—0.5 foot (April, May)

Months in which ponding does not occur: Beseman—July, August; Greenwood—July, August, September

Interpretive Groups

Land capability classification: 7w

Michigan soil management group: Beseman—M/3c; Greenwood—Mc-a

Habitat type: PCS

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

382—Cathro-Arnheim, frequently flooded, complex, 0 to 1 percent slopes

Setting

Landform: Flood plains

Average Map Unit Composition

45 percent Cathro and similar soils

44 percent Arnheim and similar soils

11 percent components of minor extent

Typical Profile

Cathro

Oa1—0 to 6 inches; muck

Oa2—6 to 31 inches; muck

Cg—31 to 80 inches; fine sandy loam

Arnheim

A—0 to 5 inches; mucky silt loam

Cg—5 to 10 inches; silt loam

C—10 to 80 inches; stratified very fine sandy loam to silt loam to loamy fine sand to fine sandy loam

Soil Properties and Qualities

Parent material: Cathro—herbaceous material over loamy drift; Arnheim—loamy alluvium

Slope: 0 to 1 percent

Hazard of soil blowing: Slight

Surface runoff class: Negligible

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Soil Survey of Gogebic County, Michigan

Drainage class: Cathro—very poorly drained; Arnheim—poorly drained

Available water capacity: Cathro—16.5 inches (very high); Arnheim—11.3 inches (high)

Shrink-swell potential: Cathro—moderate; Arnheim—low

Permeability: Moderate

Highest frequency of flooding: Cathro—none; Arnheim—frequent (March, April, May, June)

Depth to seasonal high water table: Cathro—at the surface (January, February, March, April, May, June, October, November, December); Arnheim—at the surface (January, February, March, April, May, October, November, December)

Depth and months of deepest ponding: Cathro—0.2 foot (March, April, May, June, October, November); Arnheim—0.2 foot (June, July, August, September, October, November)

Months in which ponding does not occur: Cathro—January, February, July, August, September, December; Arnheim—January, February, March, April, May, December

Interpretive Groups

Land capability classification: 7w

Michigan soil management group: Cathro—M/3c; Arnheim—L-2c

Habitat type: FMC-C

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

388—Gay-Tula complex, 0 to 3 percent slopes, stony

Setting

Landform: Depressions on till plains

Average Map Unit Composition

50 percent Gay and similar soils

40 percent Tula and similar soils

10 percent components of minor extent

Typical Profile

Gay

Oa—0 to 4 inches; muck

A—4 to 7 inches; fine sandy loam

Eg—7 to 11 inches; sandy loam

Bw—11 to 16 inches; sandy loam

BC—16 to 30 inches; sandy loam

C—30 to 80 inches; sandy loam

Tula

Oa—0 to 1 inch; highly decomposed plant material

A—1 to 5 inches; cobbly very fine sandy loam

E—5 to 8 inches; cobbly very fine sandy loam

Bs1—8 to 20 inches; cobbly very fine sandy loam

Bs2—20 to 28 inches; gravelly sandy loam

2E/Bx—28 to 37 inches; gravelly sandy loam

2B/Ex—37 to 62 inches; gravelly loam

2C—62 to 80 inches; gravelly sandy loam

Soil Properties and Qualities

Parent material: Gay—coarse-loamy till; Tula—modified loamy eolian deposits over loamy till
Slope: Gay—0 to 2 percent; Tula—0 to 3 percent
Hazard of soil blowing: Moderate
Surface runoff class: Gay—negligible; Tula—low
Potential for frost action: High
Depth to restrictive feature: Gay—more than 80 inches; Tula—28 inches to a fragipan
Drainage class: Gay—poorly drained; Tula—somewhat poorly drained
Available water capacity: 7.2 to 8.1 inches (moderate)
Shrink-swell potential: Gay—low; Tula—moderate
Permeability: Gay—moderate; Tula—very slow
Flooding: None
Depth to seasonal high water table: Gay—at the surface (January, February, March, April, May, October, November, December); Tula—0.5 foot to 2.5 feet (April, May)
Depth and months of deepest ponding: Gay—0.3 foot (March, April, May, October, November); Tula—none
Months in which ponding does not occur: Gay—January, February, June, July, August, September, December

Interpretive Groups

Land capability classification: 5w
Michigan soil management group: Gay—3c; Tula—3b-af
Habitat type: Gay—TMC; Tula—TMC-D

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

398B—Tula-Gay-Wakefield complex, 0 to 6 percent slopes, stony

Setting

Landform: Till plains

Average Map Unit Composition

50 percent Tula and similar soils
30 percent Gay and similar soils
15 percent Wakefield and similar soils
5 percent components of minor extent

Typical Profile

Tula

Oa—0 to 1 inch; highly decomposed plant material
A—1 to 5 inches; cobbly very fine sandy loam
E—5 to 8 inches; cobbly very fine sandy loam
Bs1—8 to 20 inches; cobbly very fine sandy loam
Bs2—20 to 28 inches; gravelly sandy loam
2E/Bx—28 to 37 inches; gravelly sandy loam
2B/Ex—37 to 62 inches; gravelly loam
2C—62 to 80 inches; gravelly sandy loam

Soil Survey of Gogebic County, Michigan

Gay

Oa—0 to 4 inches; muck
A—4 to 7 inches; fine sandy loam
Eg—7 to 11 inches; sandy loam
Bw—11 to 16 inches; sandy loam
BC—16 to 30 inches; sandy loam
C—30 to 80 inches; sandy loam

Wakefield

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 4 inches; loam
E—4 to 7 inches; silt loam
Bhs—7 to 10 inches; loam
Bs—10 to 16 inches; fine sandy loam
2E/Bx—16 to 26 inches; fine sandy loam
2B/Ex—26 to 54 inches; silt loam
2BC—54 to 70 inches; fine sandy loam
2C—70 to 80 inches; fine sandy loam

Soil Properties and Qualities

Parent material: Tula and Wakefield—modified loamy eolian deposits over loamy till;

Gay—coarse-loamy till

Slope: Tula—0 to 4 percent; Gay—0 to 2 percent; Wakefield—1 to 6 percent

Hazard of soil blowing: Tula and Gay—moderate; Wakefield—slight

Surface runoff class: Tula—low; Gay—negligible; Wakefield—medium

Potential for frost action: Tula and Gay—high; Wakefield—moderate

Depth to restrictive feature: Tula—28 inches to a fragipan; Gay—more than 80 inches; Wakefield—16 inches to a fragipan

Drainage class: Tula—somewhat poorly drained; Gay—poorly drained; Wakefield—moderately well drained

Available water capacity: Tula and Gay—7.2 to 8.1 inches (moderate); Wakefield—13.8 inches (very high)

Shrink-swell potential: Tula and Wakefield—moderate; Gay—low

Permeability: Tula and Wakefield—very slow; Gay—moderate

Flooding: None

Depth to seasonal high water table: Tula—0.5 foot to 2.5 feet (April, May); Gay—at the surface (January, February, March, April, May, October, November, December); Wakefield—1 to 2 feet (April)

Depth and months of deepest ponding: Tula and Wakefield—none; Gay—0.3 foot (March, April, May, October, November)

Months in which ponding does not occur: Gay—January, February, June, July, August, September, December

Interpretive Groups

Land capability classification: 4w

Michigan soil management group: Tula—3b-af; Gay—3c; Wakefield—2.5a-a

Habitat type: Tula—TMC-D; Gay—TMC; Wakefield—ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

418—Loxley and Beseman soils, 0 to 1 percent slopes

Setting

Landform: Depressions on till plains

Average Map Unit Composition

0 to 100 percent Loxley and similar soils
0 to 100 percent Beseman and similar soils
0 to 11 percent components of minor extent

Typical Profile

Loxley

Oi—0 to 5 inches; peat
Oa1—5 to 26 inches; muck
Oa2—26 to 45 inches; muck
Oe—45 to 80 inches; mucky peat

Beseman

Oe—0 to 2 inches; mucky peat
Oi—2 to 9 inches; peat
Oa1—9 to 28 inches; muck
Oa2—28 to 35 inches; muck
Oa3—35 to 44 inches; muck
Ab—44 to 47 inches; loam
Eb—47 to 57 inches; silt loam
Bw—57 to 67 inches; silt loam
C—67 to 80 inches; silt loam

Soil Properties and Qualities

Parent material: Loxley—herbaceous material; Beseman—highly decomposed organic material over loamy glaciofluvial deposits

Slope: 0 to 1 percent

Hazard of soil blowing: Slight

Surface runoff class: Negligible

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Available water capacity: 22.4 to 26.5 inches (very high)

Shrink-swell potential: Loxley—low; Beseman—moderate

Permeability: Loxley—moderately rapid; Beseman—moderate

Flooding: None

Depth to seasonal high water table: At the surface (January, February, March, April, May, June, September, October, November, December)

Depth and months of deepest ponding: Loxley—0.5 foot (April, May); Beseman—0.5 foot (January, February, March, April, May, June, September, October, November, December)

Months in which ponding does not occur: Loxley—July, August, September; Beseman—July, August

Interpretive Groups

Land capability classification: 7w

Michigan soil management group: Loxley—Mc-a; Beseman—M/3c

Habitat type: PCS

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

**419—Pleine-Cathro-Gay complex, 0 to 1 percent slopes,
stony**

Setting

Landform: Drainageways on till plains

Average Map Unit Composition

45 percent Pleine and similar soils

30 percent Cathro and similar soils

25 percent Gay and similar soils

Typical Profile

Pleine

Oa—0 to 9 inches; very cobbly muck

Bg—9 to 20 inches; very fine sandy loam

Bw—20 to 33 inches; fine sandy loam

C—33 to 80 inches; gravelly sandy loam

Cathro

Oa1—0 to 6 inches; muck

Oa2—6 to 31 inches; muck

Cg—31 to 80 inches; fine sandy loam

Gay

Oa—0 to 4 inches; muck

A—4 to 7 inches; fine sandy loam

Eg—7 to 11 inches; sandy loam

Bw—11 to 16 inches; sandy loam

BC—16 to 30 inches; sandy loam

C—30 to 80 inches; sandy loam

Soil Properties and Qualities

Parent material: Pleine and Gay—coarse-loamy till; Cathro—herbaceous material over loamy drift

Slope: 0 to 1 percent

Hazard of soil blowing: Pleine and Cathro—slight; Gay—moderate

Surface runoff class: Pleine—very low; Cathro and Gay—negligible

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Pleine and Gay—poorly drained; Cathro—very poorly drained

Available water capacity: Pleine—11.7 inches (high); Cathro—16.5 inches (very high); Gay—8.1 inches (moderate)

Shrink-swell potential: Pleine and Gay—low; Cathro—moderate

Permeability: Moderate

Flooding: None

Depth to seasonal high water table: Pleine—at the surface (January, February, March, April, May, November, December); Cathro—at the surface (January, February, March, April, May, June, October, November, December); Gay—at the surface (January, February, March, April, May, October, November, December)

Soil Survey of Gogebic County, Michigan

Depth and months of deepest ponding: Pleine and Cathro—0.2 foot (March, April, May, June, October, November); Gay—0.3 foot (March, April, May, October, November)

Months in which ponding does not occur: Pleine and Cathro—January, February, July, August, September, December; Gay—January, February, June, July, August, September, December

Interpretive Groups

Land capability classification: 5w

Michigan soil management group: Pleine and Gay—3c; Cathro—M/3c

Habitat type: Pleine and Cathro—FI-C; Gay—TMC

Major Uses

Dominant use: Wildlife habitat

Other uses: Recreation

424—Gay mucky peat, 0 to 1 percent slopes, stony

Setting

Landform: Depressions on till plains

Average Map Unit Composition

85 percent Gay and similar soils

15 percent components of minor extent

Typical Profile

Gay

Oe—0 to 4 inches; mucky peat

A—4 to 7 inches; fine sandy loam

Eg—7 to 11 inches; sandy loam

Bw—11 to 16 inches; sandy loam

BC—16 to 30 inches; sandy loam

C—30 to 80 inches; sandy loam

Soil Properties and Qualities

Parent material: Coarse-loamy till

Slope: 0 to 1 percent

Hazard of soil blowing: Moderate

Surface runoff class: Negligible

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Available water capacity: 8.5 inches (moderate)

Shrink-swell potential: Low

Permeability: Moderate

Flooding: None

Depth to seasonal high water table: At the surface (January, February, March, April, May, October, November, December)

Depth and months of deepest ponding: 0.3 foot (March, April, May, October, November)

Months in which ponding does not occur: January, February, June, July, August, September, December

Interpretive Groups

Land capability classification: 5w

Michigan soil management group: 3c

Habitat type: TMC

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

425—Foxpaw-Gay complex, 0 to 2 percent slopes, stony

Setting

Landform: Drainageways and depressions on till plains

Average Map Unit Composition

45 percent Foxpaw and similar soils

40 percent Gay and similar soils

15 percent components of minor extent

Typical Profile

Foxpaw

Oi—0 to 1 inch; slightly decomposed plant material

Oa—1 to 3 inches; muck

E—3 to 8 inches; cobbly loam

Bhs—8 to 15 inches; cobbly fine sandy loam

Bs—15 to 23 inches; gravelly fine sandy loam

BC—23 to 32 inches; sandy loam

C—32 to 80 inches; fine sandy loam

Gay

Oe—0 to 4 inches; mucky peat

A—4 to 7 inches; fine sandy loam

Eg—7 to 11 inches; sandy loam

Bw—11 to 16 inches; sandy loam

BC—16 to 30 inches; sandy loam

C—30 to 80 inches; sandy loam

Soil Properties and Qualities

Parent material: Coarse-loamy till

Slope: Foxpaw—0 to 1 percent; Gay—0 to 2 percent

Hazard of soil blowing: Foxpaw—slight; Gay—moderate

Surface runoff class: Negligible

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Available water capacity: 8.2 to 8.5 inches (moderate)

Shrink-swell potential: Foxpaw—moderate; Gay—low

Permeability: Foxpaw—moderately rapid; Gay—moderate

Flooding: None

Depth to seasonal high water table: At the surface (January, February, March, April, May, October, November, December)

Depth and months of deepest ponding: 0.3 foot (March, April, May, October, November)

Months in which ponding does not occur: January, February, June, July, August, September, December

Interpretive Groups

Land capability classification: 5w

Michigan soil management group: 3c

Habitat type: Foxpaw—FI; Gay—TMC

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

428C—Gogebic-Michigamme complex, 2 to 18 percent slopes, rocky, very stony

Setting

Landform: Moraines

Average Map Unit Composition

70 percent Gogebic and similar soils

25 percent Michigamme and similar soils

5 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; silt loam

E—5 to 8 inches; silt loam

Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam

2E/Bx—20 to 33 inches; gravelly fine sandy loam

2B/Ex—33 to 49 inches; fine sandy loam

2Bt—49 to 54 inches; fine sandy loam

2BC—54 to 68 inches; fine sandy loam

2C—68 to 80 inches; gravelly fine sandy loam

Michigamme

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 2 inches; cobbly silt loam

E—2 to 4 inches; cobbly silt loam

Bhs—4 to 7 inches; silt loam

Bs1—7 to 14 inches; silt loam

Bs2—14 to 20 inches; silt loam

Bs3—20 to 24 inches; very cobbly silt loam

2Bx—24 to 31 inches; very cobbly fine sandy loam

3R—31 inches; bedrock

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till

Slope: 2 to 18 percent

Hazard of soil blowing: Slight

Surface runoff class: Medium

Potential for frost action: Moderate

Soil Survey of Gogebic County, Michigan

Depth to restrictive feature: Gogebic—20 inches to a fragipan; Michigamme—22 to 40 inches to lithic bedrock

Drainage class: Gogebic—moderately well drained; Michigamme—well drained

Available water capacity: 5.0 to 5.5 inches (low)

Shrink-swell potential: Moderate

Permeability: Gogebic—very slow; Michigamme—moderate

Flooding: None

Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Michigamme—more than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 6s

Michigan soil management group: Gogebic—3a-af; Michigamme—3/Ra

Habitat type: AVO

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

428D—Gogebic-Michigamme complex, 18 to 35 percent slopes, rocky, very stony

Setting

Landform: Moraines

Average Map Unit Composition

70 percent Gogebic and similar soils

25 percent Michigamme and similar soils

5 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; silt loam

E—5 to 8 inches; silt loam

Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam

2E/Bx—20 to 33 inches; gravelly fine sandy loam

2B/Ex—33 to 49 inches; fine sandy loam

2Bt—49 to 54 inches; fine sandy loam

2BC—54 to 68 inches; fine sandy loam

2C—68 to 80 inches; gravelly fine sandy loam

Michigamme

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 2 inches; cobbly silt loam

E—2 to 4 inches; cobbly silt loam

Bhs—4 to 7 inches; silt loam

Bs1—7 to 14 inches; silt loam

Bs2—14 to 20 inches; silt loam

Bs3—20 to 24 inches; very cobbly silt loam

2Bx—24 to 31 inches; very cobbly fine sandy loam
3R—31 inches; bedrock

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till
Slope: 18 to 35 percent
Hazard of soil blowing: Slight
Surface runoff class: High
Potential for frost action: Moderate
Depth to restrictive feature: Gogebic—20 inches to a fragipan; Michigamme—22 to 40 inches to lithic bedrock
Drainage class: Gogebic—moderately well drained; Michigamme—well drained
Available water capacity: 5.0 to 5.5 inches (low)
Shrink-swell potential: Moderate
Permeability: Gogebic—very slow; Michigamme—moderate
Flooding: None
Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Michigamme—more than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: Gogebic—3a-af; Michigamme—3/Ra
Habitat type: AVO

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

429B—Gogebic-Peshekee complex, 1 to 6 percent slopes, very rocky, very stony

Setting

Landform: Moraines

Average Map Unit Composition

79 percent Gogebic and similar soils
15 percent Peshekee and similar soils
6 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; silt loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
2C—68 to 80 inches; gravelly fine sandy loam

Peshekee

Oe—0 to 1 inch; very cobbly moderately decomposed plant material

A—1 to 4 inches; cobbly silt loam

E—4 to 6 inches; cobbly silt loam

Bhs—6 to 9 inches; cobbly silt loam

Bs—9 to 19 inches; cobbly fine sandy loam

2R—19 inches; bedrock

Soil Properties and Qualities

Parent material: Gogebic—modified loamy eolian deposits over loamy till;

Peshekee—loamy till

Slope: Gogebic—1 to 6 percent; Peshekee—3 to 6 percent

Hazard of soil blowing: Slight

Surface runoff class: Medium

Potential for frost action: Moderate

Depth to restrictive feature: Gogebic—20 inches to a fragipan; Peshekee—19 inches to lithic bedrock

Drainage class: Gogebic—moderately well drained; Peshekee—well drained

Available water capacity: Gogebic—5.5 inches (low); Peshekee—3 inches (very low)

Shrink-swell potential: Gogebic—moderate; Peshekee—low

Permeability: Gogebic—very slow; Peshekee—moderate

Flooding: None

Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Peshekee—more than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 6s

Michigan soil management group: Gogebic—3a-af; Peshekee—Ra

Habitat type: Gogebic—ATD; Peshekee—ATD-D

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

429C—Gogebic-Peshekee complex, 6 to 18 percent slopes, very rocky, very stony

Setting

Landform: Moraines

Average Map Unit Composition

79 percent Gogebic and similar soils

15 percent Peshekee and similar soils

6 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; silt loam

E—5 to 8 inches; silt loam

Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam

2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
2C—68 to 80 inches; gravelly fine sandy loam

Peshekee

Oe—0 to 1 inch; very cobbly moderately decomposed plant material
A—1 to 4 inches; cobbly silt loam
E—4 to 6 inches; cobbly silt loam
Bhs—6 to 9 inches; cobbly silt loam
Bs—9 to 19 inches; cobbly fine sandy loam
2R—19 inches; bedrock

Soil Properties and Qualities

Parent material: Gogebic—modified loamy eolian deposits over loamy till;
Peshekee—loamy till
Slope: 6 to 18 percent
Hazard of soil blowing: Slight
Surface runoff class: Medium
Potential for frost action: Moderate
Depth to restrictive feature: Gogebic—20 inches to a fragipan; Peshekee—19 inches
to lithic bedrock
Drainage class: Gogebic—moderately well drained; Peshekee—well drained
Available water capacity: Gogebic—5.5 inches (low); Peshekee—3 inches (very low)
Shrink-swell potential: Gogebic—moderate; Peshekee—low
Permeability: Gogebic—very slow; Peshekee—moderate
Flooding: None
Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Peshekee—more
than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: Gogebic—3a-af; Peshekee—Ra
Habitat type: Gogebic—ATD; Peshekee—ATD-D

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

**429D—Gogebic-Peshekee complex, 18 to 35 percent
slopes, very rocky, very stony**

Setting

Landform: Till plains

Average Map Unit Composition

75 percent Gogebic and similar soils
15 percent Peshekee and similar soils
10 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; silt loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
2C—68 to 80 inches; gravelly fine sandy loam

Peshekee

Oe—0 to 1 inch; very cobbly moderately decomposed plant material
A—1 to 4 inches; cobbly silt loam
E—4 to 6 inches; cobbly silt loam
Bhs—6 to 9 inches; cobbly silt loam
Bs—9 to 19 inches; cobbly fine sandy loam
2R—19 inches; bedrock

Soil Properties and Qualities

Parent material: Gogebic—modified loamy eolian deposits over loamy till;

Peshekee—loamy till

Slope: 18 to 35 percent

Hazard of soil blowing: Slight

Surface runoff class: High

Potential for frost action: Moderate

Depth to restrictive feature: Gogebic—20 inches to a fragipan; Peshekee—19 inches to lithic bedrock

Drainage class: Gogebic—moderately well drained; Peshekee—well drained

Available water capacity: Gogebic—5.5 inches (low); Peshekee—3 inches (very low)

Shrink-swell potential: Gogebic—moderate; Peshekee—low

Permeability: Gogebic—very slow; Peshekee—moderate

Flooding: None

Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Peshekee—more than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: Gogebic—3a-af; Peshekee—Ra

Habitat type: Gogebic—ATD; Peshekee—ATD-D

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

429E—Schweitzer-Peshekee complex, 35 to 55 percent slopes, very rocky, very stony

Setting

Landform: Moraines

Average Map Unit Composition

60 percent Schweitzer and similar soils
35 percent Peshekee and similar soils
5 percent components of minor extent

Typical Profile

Schweitzer

A—0 to 1 inch; cobbly very fine sandy loam
E—1 to 5 inches; cobbly silt loam
Bhs—5 to 8 inches; cobbly very fine sandy loam
Bs—8 to 21 inches; cobbly very fine sandy loam
2E/Bx—21 to 27 inches; very cobbly loamy sand
2B/Ex—27 to 43 inches; very cobbly sandy loam
2B/E—43 to 61 inches; very cobbly sandy loam
2C—61 to 80 inches; very cobbly loamy sand

Peshekee

Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 4 inches; cobbly silt loam
E—4 to 6 inches; cobbly silt loam
Bhs—6 to 9 inches; cobbly silt loam
Bs—9 to 19 inches; cobbly fine sandy loam
2R—19 inches; bedrock

Soil Properties and Qualities

Parent material: Schweitzer—modified loamy eolian deposits over cobbly and gravelly loamy and sandy till; Peshekee—loamy till

Slope: 35 to 55 percent

Hazard of soil blowing: Slight

Surface runoff class: High

Potential for frost action: Moderate

Depth to restrictive feature: Schweitzer—21 inches to a fragipan; Peshekee—19 inches to lithic bedrock

Drainage class: Well drained

Available water capacity: Schweitzer—4.8 inches (low); Peshekee—3 inches (very low)

Shrink-swell potential: Schweitzer—moderate; Peshekee—low

Permeability: Schweitzer—very slow; Peshekee—moderate

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7s

Michigan soil management group: Schweitzer—3a-af; Peshekee—Ra

Habitat type: Schweitzer—ATD; Peshekee—ATD-D

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

430B—Stutts loamy fine sand, 1 to 6 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

90 percent Stutts and similar soils

10 percent components of minor extent

Typical Profile

Stutts

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 6 inches; loamy fine sand

Bhs—6 to 8 inches; loamy fine sand

Bs1—8 to 15 inches; loamy fine sand

Bs2—15 to 18 inches; fine sand

BC—18 to 28 inches; fine sand

C—28 to 80 inches; fine sand

Soil Properties and Qualities

Parent material: Sandy glaciofluvial deposits

Slope: 1 to 6 percent

Hazard of soil blowing: Moderate

Surface runoff class: Very low

Potential for frost action: Low

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Available water capacity: 4.5 inches (low)

Shrink-swell potential: Low

Permeability: Moderately rapid

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 3s

Michigan soil management group: 4a

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

430C—Stutts loamy fine sand, 6 to 18 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

90 percent Stutts and similar soils

10 percent components of minor extent

Typical Profile

Stutts

Oe—0 to 1 inch; moderately decomposed plant material
E—1 to 6 inches; loamy fine sand
Bhs—6 to 8 inches; loamy fine sand
Bs1—8 to 15 inches; loamy fine sand
Bs2—15 to 18 inches; fine sand
BC—18 to 28 inches; fine sand
C—28 to 80 inches; fine sand

Soil Properties and Qualities

Parent material: Sandy glaciofluvial deposits
Slope: 6 to 18 percent
Hazard of soil blowing: Moderate
Surface runoff class: Medium
Potential for frost action: Low
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Available water capacity: 4.5 inches (low)
Shrink-swell potential: Low
Permeability: Moderately rapid
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 4e
Michigan soil management group: 4a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

430D—Stutts loamy fine sand, 18 to 35 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

90 percent Stutts and similar soils
10 percent components of minor extent

Typical Profile

Stutts

Oe—0 to 1 inch; moderately decomposed plant material
E—1 to 6 inches; loamy fine sand
Bhs—6 to 8 inches; loamy fine sand
Bs1—8 to 15 inches; loamy fine sand
Bs2—15 to 18 inches; fine sand
BC—18 to 28 inches; fine sand
C—28 to 80 inches; fine sand

Soil Properties and Qualities

Parent material: Sandy glaciofluvial deposits
Slope: 18 to 35 percent
Hazard of soil blowing: Moderate
Surface runoff class: Medium
Potential for frost action: Low
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Available water capacity: 4.5 inches (low)
Shrink-swell potential: Low
Permeability: Moderately rapid
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: 4a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

430E—Stutts loamy fine sand, 35 to 55 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

90 percent Stutts and similar soils
10 percent components of minor extent

Typical Profile

Stutts

Oe—0 to 1 inch; moderately decomposed plant material
E—1 to 6 inches; loamy fine sand
Bhs—6 to 8 inches; loamy fine sand
Bs1—8 to 15 inches; loamy fine sand
Bs2—15 to 18 inches; fine sand
BC—18 to 28 inches; fine sand
C—28 to 80 inches; fine sand

Soil Properties and Qualities

Parent material: Sandy glaciofluvial deposits
Slope: 35 to 55 percent
Hazard of soil blowing: Moderate
Surface runoff class: Medium
Potential for frost action: Low
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Available water capacity: 4.5 inches (low)
Shrink-swell potential: Low

Permeability: Moderately rapid

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: 4a

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

432C—Gogebic-Michigamme-Rock outcrop complex, 6 to 18 percent slopes, very stony

Setting

Landform: Moraines

Average Map Unit Composition

68 percent Gogebic and similar soils

15 percent Michigamme and similar soils

15 percent Rock outcrop

2 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; silt loam

E—5 to 8 inches; silt loam

Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam

2E/Bx—20 to 33 inches; gravelly fine sandy loam

2B/Ex—33 to 49 inches; fine sandy loam

2Bt—49 to 54 inches; fine sandy loam

2BC—54 to 68 inches; fine sandy loam

2C—68 to 80 inches; gravelly fine sandy loam

Michigamme

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 2 inches; cobbly silt loam

E—2 to 4 inches; cobbly silt loam

Bhs—4 to 7 inches; silt loam

Bs1—7 to 14 inches; silt loam

Bs2—14 to 20 inches; silt loam

Bs3—20 to 24 inches; very cobbly silt loam

2Bx—24 to 31 inches; very cobbly fine sandy loam

3R—31 inches; bedrock

Soil Properties and Qualities

Parent material: Gogebic—modified loamy eolian deposits over loamy till;

Michigamme—silty or loamy material over loamy till

Soil Survey of Gogebic County, Michigan

Slope: 6 to 18 percent

Hazard of soil blowing: Slight

Surface runoff class: Medium

Potential for frost action: Moderate

Depth to restrictive feature: Gogebic—20 inches to a fragipan; Michigamme—31 inches to lithic bedrock

Drainage class: Gogebic—moderately well drained; Michigamme—well drained

Available water capacity: 5.0 to 5.5 inches (low)

Shrink-swell potential: Moderate

Permeability: Gogebic—very slow; Michigamme—moderate

Flooding: None

Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Michigamme—more than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 6s

Michigan soil management group: Gogebic—3a-af; Michigamme—3/Ra; Rock outcrop—none assigned

Habitat type: Gogebic—AVO; Michigamme—ATD; Rock outcrop—none assigned

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

432D—Gogebic-Michigamme-Rock outcrop complex, 6 to 35 percent slopes, very stony

Setting

Landform: Moraines

Average Map Unit Composition

68 percent Gogebic and similar soils

15 percent Michigamme and similar soils

15 percent Rock outcrop

2 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; silt loam

E—5 to 8 inches; silt loam

Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam

2E/Bx—20 to 33 inches; gravelly fine sandy loam

2B/Ex—33 to 49 inches; fine sandy loam

2Bt—49 to 54 inches; fine sandy loam

2BC—54 to 68 inches; fine sandy loam

2C—68 to 80 inches; gravelly fine sandy loam

Michigamme

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 2 inches; cobbly silt loam

E—2 to 4 inches; cobbly silt loam
Bhs—4 to 7 inches; silt loam
Bs1—7 to 14 inches; silt loam
Bs2—14 to 20 inches; silt loam
Bs3—20 to 24 inches; very cobbly silt loam
2Bx—24 to 31 inches; very cobbly fine sandy loam
3R—31 inches; bedrock

Soil Properties and Qualities

Parent material: Gogebic—modified loamy eolian deposits over loamy till;
Michigamme—silty or loamy material over loamy till
Slope: 6 to 35 percent
Hazard of soil blowing: Slight
Surface runoff class: High
Potential for frost action: Moderate
Depth to restrictive feature: Gogebic—20 inches to a fragipan; Michigamme—31 inches to lithic bedrock
Drainage class: Gogebic—moderately well drained; Michigamme—well drained
Available water capacity: 5.0 to 5.5 inches (low)
Shrink-swell potential: Moderate
Permeability: Gogebic—very slow; Michigamme—moderate
Flooding: None
Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Michigamme—more than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: Gogebic—3a-af; Michigamme—3/Ra; Rock outcrop—none assigned
Habitat type: Gogebic—AVO; Michigamme—ATD; Rock outcrop—none assigned

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

432E—Schweitzer-Michigamme-Rock outcrop complex, 18 to 55 percent slopes, very stony

Setting

Landform: Moraines

Average Map Unit Composition

45 percent Schweitzer and similar soils
20 percent Michigamme and similar soils
20 percent Rock outcrop
15 percent components of minor extent

Typical Profile

Schweitzer

A—0 to 1 inch; cobbly very fine sandy loam
E—1 to 5 inches; cobbly silt loam
Bhs—5 to 8 inches; cobbly very fine sandy loam

Bs—8 to 21 inches; cobbly very fine sandy loam
2E/Bx—21 to 27 inches; very cobbly loamy sand
2B/Ex—27 to 43 inches; very cobbly sandy loam
2B/E—43 to 61 inches; very cobbly sandy loam
2C—61 to 80 inches; very cobbly loamy sand

Michigamme

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; cobbly silt loam
E—2 to 4 inches; cobbly silt loam
Bhs—4 to 7 inches; silt loam
Bs1—7 to 14 inches; silt loam
Bs2—14 to 20 inches; silt loam
Bs3—20 to 24 inches; very cobbly silt loam
2Bx—24 to 31 inches; very cobbly fine sandy loam
3R—31 inches; bedrock

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over cobbly and gravelly loamy and sandy till
Slope: 18 to 55 percent
Hazard of soil blowing: Schweitzer—slight; Michigamme—moderate
Surface runoff class: High
Potential for frost action: Moderate
Depth to restrictive feature: Schweitzer—21 inches to a fragipan; Michigamme—22 to 40 inches to lithic bedrock
Drainage class: Well drained
Available water capacity: 4.8 to 5.0 inches (low)
Shrink-swell potential: Moderate
Permeability: Schweitzer—very slow; Michigamme—moderate
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7s
Michigan soil management group: Schweitzer—3a-af; Michigamme—3/Ra; Rock outcrop—none assigned
Habitat type: Schweitzer—AVO; Michigamme—ATD; Rock outcrop—none assigned

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

**432F—Schweitzer-Michigamme-Rock outcrop complex,
35 to 55 percent slopes, very stony**

Setting

Landform: Moraines

Average Map Unit Composition

45 percent Schweitzer and similar soils
20 percent Michigamme and similar soils

20 percent Rock outcrop
15 percent components of minor extent

Typical Profile

Schweitzer

A—0 to 1 inch; cobbly very fine sandy loam
E—1 to 5 inches; cobbly silt loam
Bhs—5 to 8 inches; cobbly very fine sandy loam
Bs—8 to 21 inches; cobbly very fine sandy loam
2E/Bx—21 to 27 inches; very cobbly loamy sand
2B/Ex—27 to 43 inches; very cobbly sandy loam
2B/E—43 to 61 inches; very cobbly sandy loam
2C—61 to 80 inches; very cobbly loamy sand

Michigamme

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; cobbly silt loam
E—2 to 4 inches; cobbly silt loam
Bhs—4 to 7 inches; silt loam
Bs1—7 to 14 inches; silt loam
Bs2—14 to 20 inches; silt loam
Bs3—20 to 24 inches; very cobbly silt loam
2Bx—24 to 31 inches; very cobbly fine sandy loam
3R—31 inches; bedrock

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over cobbly and gravelly loamy and sandy till
Slope: 35 to 55 percent
Hazard of soil blowing: Schweitzer—slight; Michigamme—moderate
Surface runoff class: High
Potential for frost action: Moderate
Depth to restrictive feature: Schweitzer—21 inches to a fragipan; Michigamme—22 to 40 inches to lithic bedrock
Drainage class: Well drained
Available water capacity: 4.8 to 5.0 inches (low)
Shrink-swell potential: Moderate
Permeability: Schweitzer—very slow; Michigamme—moderate
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7s
Michigan soil management group: Schweitzer—3a-af; Michigamme—3/Ra; Rock outcrop—none assigned
Habitat type: Schweitzer—AVO; Michigamme—ATD; Rock outcrop—none assigned

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

433B—McMillan fine sandy loam, 1 to 6 percent slopes

Setting

Landform: Moraines; outwash plains

Average Map Unit Composition

85 percent McMillan and similar soils
15 percent components of minor extent

Typical Profile

McMillan

Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 2 inches; fine sandy loam
E—2 to 5 inches; fine sandy loam
Bhs—5 to 9 inches; fine sandy loam
Bs1—9 to 14 inches; fine sandy loam
Bs2—14 to 19 inches; fine sandy loam
Bw—19 to 29 inches; fine sand
E and Bt—29 to 72 inches; stratified sand to loamy fine sand
C—72 to 80 inches; stratified coarse sand to sand to loamy sand

Soil Properties and Qualities

Parent material: Loamy over sandy glaciofluvial deposits
Slope: 1 to 6 percent
Hazard of soil blowing: Slight
Surface runoff class: Low
Potential for frost action: Low
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Available water capacity: 4 inches (low)
Shrink-swell potential: Low
Permeability: Moderately rapid
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 2e
Michigan soil management group: 3a
Habitat type: AVO

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

433C—McMillan fine sandy loam, 6 to 18 percent slopes

Setting

Landform: Moraines; outwash plains

Average Map Unit Composition

85 percent McMillan and similar soils
15 percent components of minor extent

Typical Profile

McMillan

Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 2 inches; fine sandy loam
E—2 to 5 inches; fine sandy loam
Bhs—5 to 9 inches; fine sandy loam
Bs1—9 to 14 inches; fine sandy loam
Bs2—14 to 19 inches; fine sandy loam
Bw—19 to 29 inches; fine sand
E and Bt—29 to 72 inches; stratified sand to loamy fine sand
C—72 to 80 inches; stratified coarse sand to sand to loamy sand

Soil Properties and Qualities

Parent material: Loamy over sandy glaciofluvial deposits
Slope: 6 to 18 percent
Hazard of soil blowing: Slight
Surface runoff class: Medium
Potential for frost action: Low
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Available water capacity: 4 inches (low)
Shrink-swell potential: Low
Permeability: Moderately rapid
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 4e
Michigan soil management group: 3a
Habitat type: AVO

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

433D—McMillan fine sandy loam, 18 to 35 percent slopes

Setting

Landform: Moraines; outwash plains

Average Map Unit Composition

85 percent McMillan and similar soils
15 percent components of minor extent

Typical Profile

McMillan

Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 2 inches; fine sandy loam
E—2 to 5 inches; fine sandy loam
Bhs—5 to 9 inches; fine sandy loam
Bs1—9 to 14 inches; fine sandy loam
Bs2—14 to 19 inches; fine sandy loam

Bw—19 to 29 inches; fine sand
E and Bt—29 to 72 inches; stratified sand to loamy fine sand
C—72 to 80 inches; stratified coarse sand to sand to loamy sand

Soil Properties and Qualities

Parent material: Loamy over sandy glaciofluvial deposits
Slope: 18 to 35 percent
Hazard of soil blowing: Slight
Surface runoff class: High
Potential for frost action: Low
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Available water capacity: 4 inches (low)
Shrink-swell potential: Low
Permeability: Moderately rapid
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: 3a
Habitat type: AVO

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

435C—Kalkaska-Waiska complex, 2 to 18 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

45 percent Kalkaska and similar soils
40 percent Waiska and similar soils
15 percent components of minor extent

Typical Profile

Kalkaska

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 6 inches; sand
Bhs—6 to 8 inches; sand
Bs—8 to 17 inches; sand
BC—17 to 32 inches; sand
C—32 to 80 inches; sand

Waiska

Oe—0 to 1 inch; moderately decomposed plant material
E—1 to 4 inches; sandy loam
Bhs—4 to 8 inches; gravelly sand
Bs—8 to 18 inches; very gravelly sand
BC—18 to 35 inches; very gravelly sand
C—35 to 61 inches; stratified coarse sand to very gravelly sand

Soil Properties and Qualities

Parent material: Kalkaska—sandy outwash; Waiska—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits

Slope: 2 to 18 percent

Hazard of soil blowing: Kalkaska—severe; Waiska—moderate

Surface runoff class: Very low

Potential for frost action: Low

Depth to restrictive feature: More than 80 inches

Drainage class: Kalkaska—somewhat excessively drained; Waiska—excessively drained

Available water capacity: Kalkaska—4.5 inches (low); Waiska—1.7 inches (very low)

Shrink-swell potential: Low

Permeability: Kalkaska—rapid; Waiska—very rapid

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 6s

Michigan soil management group: Kalkaska—5a; Waiska—Ga

Habitat type: Kalkaska—ATD; Waiska—AVO

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

435D—Kalkaska-Waiska complex, 18 to 35 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

45 percent Kalkaska and similar soils

40 percent Waiska and similar soils

15 percent components of minor extent

Typical Profile

Kalkaska

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 6 inches; sand

Bhs—6 to 8 inches; sand

Bs—8 to 17 inches; sand

BC—17 to 32 inches; sand

C—32 to 80 inches; sand

Waiska

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 4 inches; sandy loam

Bhs—4 to 8 inches; gravelly sand

Bs—8 to 18 inches; very gravelly sand

BC—18 to 35 inches; very gravelly sand

C—35 to 61 inches; stratified coarse sand to very gravelly sand

Soil Properties and Qualities

Parent material: Kalkaska—sandy outwash; Waiska—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits

Slope: 18 to 35 percent

Hazard of soil blowing: Kalkaska—severe; Waiska—moderate

Surface runoff class: Low

Potential for frost action: Low

Depth to restrictive feature: More than 80 inches

Drainage class: Kalkaska—somewhat excessively drained; Waiska—excessively drained

Available water capacity: Kalkaska—4.5 inches (low); Waiska—1.7 inches (very low)

Shrink-swell potential: Low

Permeability: Kalkaska—rapid; Waiska—very rapid

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7s

Michigan soil management group: Kalkaska—5a; Waiska—Ga

Habitat type: Kalkaska—ATD; Waiska—AVO

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

435E—Kalkaska-Waiska complex, 35 to 55 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

45 percent Kalkaska and similar soils

40 percent Waiska and similar soils

15 percent components of minor extent

Typical Profile

Kalkaska

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 6 inches; sand

Bhs—6 to 8 inches; sand

Bs—8 to 17 inches; sand

BC—17 to 32 inches; sand

C—32 to 80 inches; sand

Waiska

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 4 inches; sandy loam

Bhs—4 to 8 inches; gravelly sand

Bs—8 to 18 inches; very gravelly sand

BC—18 to 35 inches; very gravelly sand

C—35 to 61 inches; stratified coarse sand to very gravelly sand

Soil Properties and Qualities

Parent material: Kalkaska—sandy outwash; Waiska—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits
Slope: 35 to 55 percent
Hazard of soil blowing: Kalkaska—severe; Waiska—moderate
Surface runoff class: Low
Potential for frost action: Low
Depth to restrictive feature: More than 80 inches
Drainage class: Kalkaska—somewhat excessively drained; Waiska—excessively drained
Available water capacity: Kalkaska—4.5 inches (low); Waiska—1.7 inches (very low)
Shrink-swell potential: Low
Permeability: Kalkaska—rapid; Waiska—very rapid
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7s
Michigan soil management group: Kalkaska—5a; Waiska—Ga
Habitat type: Kalkaska—ATD; Waiska—AVO

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

437B—Manitowish-Channing complex, 0 to 3 percent slopes, occasionally flooded, very rocky

Setting

Landform: Outwash plains

Average Map Unit Composition

65 percent Manitowish and similar soils
20 percent Channing and similar soils
15 percent components of minor extent

Typical Profile

Manitowish

Oi—0 to 1 inch; slightly decomposed plant material
Oa—1 to 2 inches; highly decomposed plant material
E—2 to 4 inches; sandy loam
Bhs—4 to 5 inches; sandy loam
Bs—5 to 10 inches; sandy loam
Bw—10 to 20 inches; sandy loam
2BC—20 to 40 inches; gravelly loamy sand
2C—40 to 80 inches; gravelly sand

Channing

Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 6 inches; very fine sandy loam
E—6 to 7 inches; very fine sandy loam
Bs1—7 to 16 inches; very fine sandy loam

Bs2—16 to 24 inches; fine sandy loam
2C1—24 to 29 inches; gravelly sand
2C2—29 to 62 inches; gravelly sand

Soil Properties and Qualities

Parent material: Manitowish—loamy eolian deposits over sandy outwash;
Channing—coarse-loamy glaciofluvial deposits over sandy and gravelly
glaciofluvial deposits
Slope: 0 to 3 percent
Hazard of soil blowing: Moderate
Surface runoff class: Manitowish—low; Channing—negligible
Potential for frost action: Manitowish—low; Channing—high
Depth to restrictive feature: More than 80 inches
Drainage class: Manitowish—moderately well drained; Channing—somewhat poorly
drained
Available water capacity: 5.3 to 5.8 inches (low)
Shrink-swell potential: Manitowish—moderate; Channing—low
Permeability: Moderate
Flooding: None
Depth to seasonal high water table: Manitowish—2.0 to 6.7 feet (April, May);
Channing—1.2 to 6.0 feet (January, February, March, April, May, November,
December)
Ponding: None

Interpretive Groups

Land capability classification: 2e
Michigan soil management group: Manitowish—4a; Channing—3/5b
Habitat type: Manitowish—ATD; Channing—ATD-CI

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

**448F—Rockland-Rock outcrop complex, 35 to 70 percent
slopes**

Setting

Landform: Slumps in river valleys

Average Map Unit Composition

75 percent Rockland and similar soils
25 percent Rock outcrop

Typical Profile

Rockland

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; silt loam
C1—5 to 22 inches; silt loam
C2—22 to 80 inches; silt loam

Soil Properties and Qualities

Parent material: Loamy rotational earth slide deposits
Slope: 35 to 70 percent

Hazard of soil blowing: Slight
Surface runoff class: Very high
Potential for frost action: Moderate
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Available water capacity: 12.4 inches (very high)
Shrink-swell potential: Moderate
Permeability: Moderately slow
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: Rockland—2.5a; Rock outcrop—none assigned
Habitat type: Rockland—AVO; Rock outcrop—none assigned

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

449C—Flintsteel-Minocqua complex, 0 to 18 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

70 percent Flintsteel and similar soils
30 percent Minocqua and similar soils

Typical Profile

Flintsteel

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 3 inches; silt loam
E—3 to 4 inches; silt loam
Bw—4 to 11 inches; loam
E/B—11 to 17 inches; loam
Bt—17 to 47 inches; silt loam
BCd1—47 to 66 inches; loam
BCd2—66 to 80 inches; silt loam

Minocqua

Oe—0 to 4 inches; muck
Eg—4 to 15 inches; silt loam
2Bg—15 to 28 inches; loam
3C—28 to 60 inches; stratified sand to gravelly coarse sand

Soil Properties and Qualities

Parent material: Flintsteel—fine-loamy till; Minocqua—silty and loamy alluvium underlain by sandy and gravelly outwash
Slope: Flintsteel—6 to 18 percent; Minocqua—0 to 1 percent
Hazard of soil blowing: Slight

Soil Survey of Gogebic County, Michigan

Surface runoff class: Flintsteel—medium; Minocqua—negligible

Potential for frost action: High

Depth to restrictive feature: Flintsteel—47 inches to dense material; Minocqua—more than 80 inches

Drainage class: Flintsteel—somewhat poorly drained; Minocqua—poorly drained

Available water capacity: Flintsteel—9.7 inches (high); Minocqua—6.2 inches (moderate)

Shrink-swell potential: Flintsteel—moderate; Minocqua—low

Permeability: Flintsteel—slow; Minocqua—moderate

Flooding: None

Depth to seasonal high water table: Flintsteel—0.5 foot to 2.5 feet (April, May); Minocqua—at the surface (April, May, November)

Depth and months of deepest ponding: Flintsteel—none; Minocqua—0.5 foot (April, May)

Months in which ponding does not occur: Minocqua—January, February, March, June, July, August, September, October, November, December

Interpretive Groups

Land capability classification: 3e

Michigan soil management group: Flintsteel—2.5b; Minocqua—4c

Habitat type: Flintsteel—AVO; Minocqua—FI

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

452F—Rockland silt loam, 35 to 70 percent slopes, stony

Setting

Landform: Slumps in river valleys

Average Map Unit Composition

90 percent Rockland and similar soils

10 percent components of minor extent

Typical Profile

Rockland

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; silt loam

Bw—5 to 23 inches; silt loam

C—23 to 80 inches; silt loam

Soil Properties and Qualities

Parent material: Loamy rotational earth slide deposits

Slope: 35 to 70 percent

Hazard of soil blowing: Slight

Surface runoff class: Very high

Potential for frost action: Moderate

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Available water capacity: 12.4 inches (very high)

Shrink-swell potential: Moderate

Permeability: Moderately slow

Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: 2.5a
Habitat type: AVO

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

460B—Belding-Manido complex, 1 to 6 percent slopes

Setting

Landform: Ground moraines

Average Map Unit Composition

55 percent Belding and similar soils
25 percent Manido and similar soils
20 percent components of minor extent

Typical Profile

Belding

Oa—0 to 1 inch; highly decomposed plant material
A1—1 to 4 inches; fine sandy loam
A2—4 to 9 inches; fine sandy loam
E—9 to 14 inches; fine sandy loam
Bs1—14 to 19 inches; fine sandy loam
Bs2—19 to 22 inches; fine sand
2Bt—22 to 34 inches; silty clay loam
2BC—34 to 36 inches; silty clay loam
2C—36 to 80 inches; silty clay loam

Manido

Oe—0 to 3 inches; moderately decomposed plant material
E—3 to 9 inches; fine sand
Bhs—9 to 11 inches; fine sand
Bs—11 to 17 inches; fine sand
BC—17 to 37 inches; fine sand
E and Bt—37 to 60 inches; stratified fine sand to sand to very fine sand
C—60 to 80 inches; stratified fine sand to sand to very fine sand

Soil Properties and Qualities

Parent material: Belding—coarse-loamy till over fine-loamy till; Manido—sandy outwash
Slope: Belding—1 to 2 percent; Manido—1 to 6 percent
Hazard of soil blowing: Belding—moderate; Manido—severe
Surface runoff class: Very low
Potential for frost action: Belding—high; Manido—low
Depth to restrictive feature: More than 80 inches

Soil Survey of Gogebic County, Michigan

Drainage class: Belding—somewhat poorly drained; Manido—moderately well drained
Available water capacity: Belding—10.5 inches (high); Manido—5.6 inches (low)
Shrink-swell potential: Belding—moderate; Manido—low
Permeability: Belding—moderately slow; Manido—moderately rapid
Flooding: None
Depth to seasonal high water table: Belding—0.5 foot to 6.7 feet (April, May);
Manido—2.0 to 6.7 feet (March)
Ponding: None

Interpretive Groups

Land capability classification: 2e
Michigan soil management group: Belding—3/2b; Manido—5a
Habitat type: TMC-D

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

461B—Loggerhead loam, 1 to 8 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

85 percent Loggerhead and similar soils
15 percent components of minor extent

Typical Profile

Loggerhead

A—0 to 4 inches; loam
E—4 to 5 inches; gravelly fine sandy loam
Bs—5 to 15 inches; gravelly loam
E/B—15 to 38 inches; gravelly fine sandy loam
2B/E—38 to 56 inches; gravelly fine sandy loam
2Bt—56 to 80 inches; loam

Soil Properties and Qualities

Parent material: Coarse-loamy till over loamy till
Slope: 1 to 8 percent
Hazard of soil blowing: Moderate
Surface runoff class: High
Potential for frost action: Moderate
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Available water capacity: 9.1 inches (high)
Shrink-swell potential: Moderate
Permeability: Moderately slow
Flooding: None
Depth to seasonal high water table: 1.5 to 6.7 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 2s
Michigan soil management group: 3/2a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

462C—Nonesuch-Rock outcrop complex, 2 to 18 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

75 percent Nonesuch and similar soils
15 percent Rock outcrop
10 percent components of minor extent

Typical Profile

Nonesuch

Oe—0 to 1 inch; moderately decomposed plant material
E—1 to 4 inches; gravelly loam
Bs—4 to 11 inches; loam
Bt1—11 to 16 inches; very gravelly fine sandy loam
Bt2—16 to 23 inches; gravelly sandy loam
B/Ex—23 to 34 inches; silt loam
Crt—34 to 50 inches; silt loam
2R—50 inches; unweathered bedrock

Soil Properties and Qualities

Parent material: Coarse-loamy till
Slope: 2 to 18 percent
Hazard of soil blowing: Slight
Surface runoff class: Medium
Potential for frost action: Moderate
Depth to restrictive feature: 23 inches to a fragipan; 34 inches to paralithic bedrock;
50 inches to lithic bedrock
Drainage class: Moderately well drained
Available water capacity: 5.1 inches (low)
Shrink-swell potential: Low
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: 1.5 to 2.8 feet (April, October)
Ponding: None

Interpretive Groups

Land capability classification: 4s
Michigan soil management group: Nonesuch—2.5a; Rock outcrop—none assigned
Habitat type: Nonesuch—AVO; Rock outcrop—none assigned

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

509—Cathro-Minocqua complex, drainageway, 0 to 1 percent slopes

Setting

Landform: Flood plains on lake plains and outwash plains; flood plains and drainageways on till plains

Average Map Unit Composition

45 percent Cathro and similar soils

40 percent Minocqua and similar soils

15 percent components of minor extent

Typical Profile

Cathro

Oa1—0 to 6 inches; muck

Oa2—6 to 31 inches; muck

Cg—31 to 80 inches; fine sandy loam

Minocqua

Oe—0 to 4 inches; muck

Eg—4 to 15 inches; silt loam

2Bg—15 to 28 inches; loam

3C—28 to 60 inches; stratified sand to gravelly coarse sand

Soil Properties and Qualities

Parent material: Cathro—herbaceous material over loamy drift; Minocqua—silty and loamy alluvium underlain by sandy and gravelly outwash

Slope: 0 to 1 percent

Hazard of soil blowing: Slight

Surface runoff class: Negligible

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Cathro—very poorly drained; Minocqua—poorly drained

Available water capacity: Cathro—15.6 to 16.5 inches (very high); Minocqua—6.2 inches (moderate)

Shrink-swell potential: Cathro—moderate; Minocqua—low

Permeability: Moderate

Flooding: None

Depth to seasonal high water table: Cathro—at the surface (January, February, March, April, May, June, October, November, December); Minocqua—at the surface (April, May, November)

Depth and months of deepest ponding: Cathro—0.2 foot (March, April, May, June, October, November); Minocqua—0.5 foot (April, May)

Months in which ponding does not occur: Cathro—January, February, July, August, September, December; Minocqua—January, February, March, June, July, August, September, October, November, December

Interpretive Groups

Land capability classification: 6w

Michigan soil management group: Cathro—M/3c; Minocqua—4c

Habitat type: FI-C

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

511A—Gogebic-Tula-Chabeneau complex, 0 to 4 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

40 percent Gogebic and similar soils

30 percent Tula and similar soils

15 percent Chabeneau and similar soils

15 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; silt loam

E—5 to 8 inches; silt loam

Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam

2E/Bx—20 to 33 inches; gravelly fine sandy loam

2B/Ex—33 to 49 inches; fine sandy loam

2Bt—49 to 54 inches; fine sandy loam

2BC—54 to 68 inches; fine sandy loam

2C—68 to 80 inches; gravelly fine sandy loam

Tula

Oa—0 to 1 inch; highly decomposed plant material

A—1 to 5 inches; cobbly very fine sandy loam

E—5 to 8 inches; cobbly very fine sandy loam

Bs1—8 to 20 inches; cobbly very fine sandy loam

Bs2—20 to 28 inches; gravelly sandy loam

2E/Bx—28 to 37 inches; gravelly sandy loam

2B/Ex—37 to 62 inches; gravelly loam

2C—62 to 80 inches; gravelly sandy loam

Chabeneau

Oe—0 to 1 inch; moderately decomposed plant material

A—1 to 2 inches; silt loam

E—2 to 5 inches; silt loam

Bs1—5 to 10 inches; silt loam

Bs2—10 to 22 inches; silt loam

2BC—22 to 30 inches; gravelly loamy sand

2C1—30 to 48 inches; stratified coarse sand to very gravelly coarse sand

2C2—48 to 121 inches; stratified sand to gravelly sand

Soil Properties and Qualities

Parent material: Gogebic and Tula—modified loamy eolian deposits over loamy till; Chabeneau—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits
Slope: Gogebic—1 to 4 percent; Tula—0 to 2 percent; Chabeneau—0 to 4 percent
Hazard of soil blowing: Gogebic and Chabeneau—slight; Tula—moderate
Surface runoff class: Gogebic—medium; Tula and Chabeneau—low
Potential for frost action: Gogebic and Chabeneau—moderate; Tula—high
Depth to restrictive feature: Gogebic—20 inches to a fragipan; Tula—28 inches to a fragipan; Chabeneau—more than 80 inches
Drainage class: Gogebic and Chabeneau—moderately well drained; Tula—somewhat poorly drained
Available water capacity: Gogebic and Chabeneau—5.5 to 5.7 inches (low); Tula—7.2 inches (moderate)
Shrink-swell potential: Gogebic and Tula—moderate; Chabeneau—low
Permeability: Gogebic and Tula—very slow; Chabeneau—moderate
Flooding: None
Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Tula—0.5 foot to 2.5 feet (April, May); Chabeneau—2 to 7 feet (April, May)
Ponding: None

Interpretive Groups

Land capability classification: 3s
Michigan soil management group: Gogebic—3a-af; Tula—3b-af; Chabeneau—3/5a
Habitat type: Gogebic and Chabeneau—AVO; Tula—AVO-CI

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

519B—Gogebic-Karlin complex, 1 to 6 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

50 percent Gogebic and similar soils
40 percent Karlin and similar soils
10 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; fine sandy loam
E—5 to 8 inches; fine sandy loam
Bhs—8 to 12 inches; fine sandy loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
2C—68 to 80 inches; gravelly fine sandy loam

Karlin

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 4 inches; fine sandy loam

Bs—4 to 15 inches; sandy loam

2BC—15 to 29 inches; sand

2C—29 to 80 inches; sand

Soil Properties and Qualities

Parent material: Gogebic—modified loamy eolian deposits over loamy till; Karlin—sandy glaciofluvial deposits

Slope: 1 to 6 percent

Hazard of soil blowing: Gogebic—slight; Karlin—moderate

Surface runoff class: Gogebic—medium; Karlin—very low

Potential for frost action: Gogebic—moderate; Karlin—low

Depth to restrictive feature: Gogebic—20 inches to a fragipan; Karlin—more than 80 inches

Drainage class: Gogebic—moderately well drained; Karlin—somewhat excessively drained

Available water capacity: 5.5 to 5.8 inches (low)

Shrink-swell potential: Gogebic—moderate; Karlin—low

Permeability: Gogebic—very slow; Karlin—moderately rapid

Flooding: None

Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Karlin—more than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 4e

Michigan soil management group: Gogebic—3a-af; Karlin—4a

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

519C—Gogebic-Karlin complex, 6 to 18 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

50 percent Gogebic and similar soils

40 percent Karlin and similar soils

10 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; fine sandy loam

E—5 to 8 inches; fine sandy loam

Bhs—8 to 12 inches; fine sandy loam

Bs—12 to 20 inches; fine sandy loam

2E/Bx—20 to 33 inches; gravelly fine sandy loam

2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
2C—68 to 80 inches; gravelly fine sandy loam

Karlin

Oe—0 to 1 inch; moderately decomposed plant material
E—1 to 4 inches; fine sandy loam
Bs—4 to 15 inches; sandy loam
2BC—15 to 29 inches; sand
2C—29 to 80 inches; sand

Soil Properties and Qualities

Parent material: Gogebic—modified loamy eolian deposits over loamy till; Karlin—sandy glaciofluvial deposits
Slope: 6 to 18 percent
Hazard of soil blowing: Gogebic—slight; Karlin—moderate
Surface runoff class: Gogebic—medium; Karlin—low
Potential for frost action: Gogebic—moderate; Karlin—low
Depth to restrictive feature: Gogebic—20 inches to a fragipan; Karlin—more than 80 inches
Drainage class: Gogebic—moderately well drained; Karlin—somewhat excessively drained
Available water capacity: 5.5 to 5.8 inches (low)
Shrink-swell potential: Gogebic—moderate; Karlin—low
Permeability: Gogebic—very slow; Karlin—moderately rapid
Flooding: None
Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Karlin—more than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 6e
Michigan soil management group: Gogebic—3a-af; Karlin—4a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

519D—Gogebic-Karlin complex, 18 to 35 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

50 percent Gogebic and similar soils
40 percent Karlin and similar soils
10 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; fine sandy loam

E—5 to 8 inches; fine sandy loam
Bhs—8 to 12 inches; fine sandy loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
2C—68 to 80 inches; gravelly fine sandy loam

Karlin

Oe—0 to 1 inch; moderately decomposed plant material
E—1 to 4 inches; fine sandy loam
Bs—4 to 15 inches; sandy loam
2BC—15 to 29 inches; sand
2C—29 to 80 inches; sand

Soil Properties and Qualities

Parent material: Gogebic—modified loamy eolian deposits over loamy till; Karlin—sandy glaciofluvial deposits
Slope: 18 to 35 percent
Hazard of soil blowing: Gogebic—slight; Karlin—moderate
Surface runoff class: Gogebic—high; Karlin—medium
Potential for frost action: Gogebic—moderate; Karlin—low
Depth to restrictive feature: Gogebic—20 inches to a fragipan; Karlin—more than 80 inches
Drainage class: Gogebic—moderately well drained; Karlin—somewhat excessively drained
Available water capacity: 5.5 to 5.8 inches (low)
Shrink-swell potential: Gogebic—moderate; Karlin—low
Permeability: Gogebic—very slow; Karlin—moderately rapid
Flooding: None
Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Karlin—more than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: Gogebic—3a-af; Karlin—4a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Recreation, wildlife habitat

522—Pits, sand and gravel

- This map unit consists of areas from which sand and gravel have been removed. Onsite investigation is needed to determine the suitability for specific uses.

Interpretive Groups

Land capability classification: None assigned
Michigan soil management group: None assigned
Habitat type: None assigned

523D—Gogebic, sandy substratum-Karlin complex, 6 to 35 percent slopes

Setting

Landform: Disintegration moraines; recessional moraines on till plains

Average Map Unit Composition

53 percent Gogebic and similar soils
40 percent Karlin and similar soils
7 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; fine sandy loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
3C—68 to 80 inches; gravelly sand

Karlin

Oe—0 to 1 inch; moderately decomposed plant material
E—1 to 4 inches; fine sandy loam
Bs—4 to 15 inches; sandy loam
2BC—15 to 29 inches; sand
2C—29 to 80 inches; sand

Soil Properties and Qualities

Parent material: Gogebic—modified loamy eolian deposits over loamy till over sandy till; Karlin—sandy glaciofluvial deposits and/or sandy flow till

Slope: 6 to 35 percent

Hazard of soil blowing: Gogebic—slight; Karlin—moderate

Surface runoff class: Gogebic—high; Karlin—medium

Potential for frost action: Gogebic—moderate; Karlin—low

Depth to restrictive feature: Gogebic—20 to 49 inches to a fragipan; Karlin—more than 80 inches

Drainage class: Gogebic—moderately well drained; Karlin—somewhat excessively drained

Available water capacity: Gogebic—4.1 to 5.5 inches (low); Karlin—4.7 to 5.8 inches (low)

Shrink-swell potential: Gogebic—moderate; Karlin—low

Permeability: Gogebic—very slow; Karlin—moderately rapid

Flooding: None

Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Karlin—more than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: Gogebic—3a-af; Karlin—4a

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

524C—Waiska-Amasa complex, esker, 6 to 18 percent slopes

Setting

Landform: Eskers on till plains

Average Map Unit Composition

45 percent Waiska and similar soils

40 percent Amasa and similar soils

15 percent components of minor extent

Typical Profile

Waiska

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 4 inches; sandy loam

Bhs—4 to 8 inches; gravelly sand

Bs—8 to 18 inches; very gravelly sand

BC—18 to 35 inches; very gravelly sand

C—35 to 61 inches; stratified coarse sand to very gravelly sand

Amasa

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 4 inches; cobbly fine sandy loam

Bhs—4 to 7 inches; silt loam

Bs1—7 to 23 inches; very fine sandy loam

Bs2—23 to 28 inches; fine sandy loam

2C1—28 to 41 inches; sand

2C2—41 to 80 inches; very gravelly sand

Soil Properties and Qualities

Parent material: Waiska—sandy and gravelly glaciofluvial deposits; Amasa—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits

Slope: 6 to 18 percent

Hazard of soil blowing: Waiska—moderate; Amasa—slight

Surface runoff class: Waiska—very low; Amasa—medium

Potential for frost action: Waiska—low; Amasa—moderate

Depth to restrictive feature: More than 80 inches

Drainage class: Waiska—excessively drained; Amasa—well drained

Available water capacity: Waiska—1.7 inches (very low); Amasa—5.7 inches (low)

Shrink-swell potential: Waiska—low; Amasa—moderate

Permeability: Waiska—very rapid; Amasa—moderate

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 6s

Michigan soil management group: Waiska—Ga; Amasa—3/5a-a

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

524D—Waiska-Amasa complex, esker, 18 to 35 percent slopes

Setting

Landform: Eskers on till plains

Average Map Unit Composition

45 percent Waiska and similar soils

40 percent Amasa and similar soils

15 percent components of minor extent

Typical Profile

Waiska

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 4 inches; sandy loam

Bhs—4 to 8 inches; gravelly sand

Bs—8 to 18 inches; very gravelly sand

BC—18 to 35 inches; very gravelly sand

C—35 to 61 inches; stratified coarse sand to very gravelly sand

Amasa

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 4 inches; cobbly fine sandy loam

Bhs—4 to 7 inches; silt loam

Bs1—7 to 23 inches; very fine sandy loam

Bs2—23 to 28 inches; fine sandy loam

2C1—28 to 41 inches; sand

2C2—41 to 80 inches; very gravelly sand

Soil Properties and Qualities

Parent material: Waiska—sandy and gravelly glaciofluvial deposits; Amasa—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits

Slope: 18 to 35 percent

Hazard of soil blowing: Waiska—moderate; Amasa—slight

Surface runoff class: Waiska—low; Amasa—high

Potential for frost action: Waiska—low; Amasa—moderate

Depth to restrictive feature: More than 80 inches

Drainage class: Waiska—excessively drained; Amasa—well drained

Available water capacity: Waiska—1.7 inches (very low); Amasa—5.7 inches (low)

Shrink-swell potential: Waiska—low; Amasa—moderate

Permeability: Waiska—very rapid; Amasa—moderate

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7s

Michigan soil management group: Waiska—Ga; Amasa—3/5a-a

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

524E—Waiska-Amasa complex, esker, 35 to 50 percent slopes

Setting

Landform: Eskers on till plains

Average Map Unit Composition

45 percent Waiska and similar soils

40 percent Amasa and similar soils

15 percent components of minor extent

Typical Profile

Waiska

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 4 inches; sandy loam

Bhs—4 to 8 inches; gravelly sand

Bs—8 to 18 inches; very gravelly sand

BC—18 to 35 inches; very gravelly sand

C—35 to 61 inches; stratified coarse sand to very gravelly sand

Amasa

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 4 inches; cobbly fine sandy loam

Bhs—4 to 7 inches; silt loam

Bs1—7 to 23 inches; very fine sandy loam

Bs2—23 to 28 inches; fine sandy loam

2C1—28 to 41 inches; sand

2C2—41 to 80 inches; very gravelly sand

Soil Properties and Qualities

Parent material: Waiska—sandy and gravelly glaciofluvial deposits; Amasa—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits

Slope: 35 to 50 percent

Hazard of soil blowing: Waiska—moderate; Amasa—slight

Surface runoff class: Waiska—low; Amasa—high

Potential for frost action: Waiska—low; Amasa—moderate

Depth to restrictive feature: More than 80 inches

Drainage class: Waiska—excessively drained; Amasa—well drained

Available water capacity: Waiska—1.7 inches (very low); Amasa—5.7 inches (low)

Shrink-swell potential: Waiska—low; Amasa—moderate

Permeability: Waiska—very rapid; Amasa—moderate

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7s

Michigan soil management group: Waiska—Ga; Amasa—3/5a-a

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Recreation, wildlife habitat

527B—Wakefield loam, 1 to 6 percent slopes, stony

Setting

Landform: Till plains

Average Map Unit Composition

85 percent Wakefield and similar soils

15 percent components of minor extent

Typical Profile

Wakefield

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 4 inches; loam

E—4 to 7 inches; silt loam

Bhs—7 to 10 inches; loam

Bs—10 to 16 inches; fine sandy loam

2E/Bx—16 to 26 inches; fine sandy loam

2B/Ex—26 to 54 inches; silt loam

2BC—54 to 70 inches; fine sandy loam

2C—70 to 80 inches; fine sandy loam

Soil Properties and Qualities

Parent material: Modified loamy eolian deposits over loamy till

Slope: 1 to 6 percent

Hazard of soil blowing: Slight

Surface runoff class: Medium

Potential for frost action: Moderate

Depth to restrictive feature: 16 inches to a fragipan

Drainage class: Moderately well drained

Available water capacity: 13.8 inches (very high)

Shrink-swell potential: Moderate

Permeability: Very slow

Flooding: None

Depth to seasonal high water table: 1 to 2 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 4e

Michigan soil management group: 2.5a-a

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Cropland, pasture, recreation, wildlife habitat

527C—Wakefield loam, 6 to 18 percent slopes, stony

Setting

Landform: Till plains

Average Map Unit Composition

85 percent Wakefield and similar soils
15 percent components of minor extent

Typical Profile

Wakefield

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 4 inches; loam
E—4 to 7 inches; silt loam
Bhs—7 to 10 inches; loam
Bs—10 to 16 inches; fine sandy loam
2E/Bx—16 to 26 inches; fine sandy loam
2B/Ex—26 to 54 inches; silt loam
2BC—54 to 70 inches; fine sandy loam
2C—70 to 80 inches; fine sandy loam

Soil Properties and Qualities

Parent material: Loamy eolian deposits over coarse-loamy till
Slope: 6 to 18 percent
Hazard of soil blowing: Slight
Surface runoff class: High
Potential for frost action: Moderate
Depth to restrictive feature: 15 to 24 inches to a fragipan
Drainage class: Moderately well drained
Available water capacity: 13.8 inches (very high)
Shrink-swell potential: Moderate
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: 1 to 2 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 6e
Michigan soil management group: 2.5a-a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Cropland, pasture, recreation, wildlife habitat

527D—Wakefield loam, 18 to 35 percent slopes, stony

Setting

Landform: Till plains

Average Map Unit Composition

85 percent Wakefield and similar soils
15 percent components of minor extent

Typical Profile

Wakefield

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 4 inches; loam
E—4 to 7 inches; silt loam
Bhs—7 to 10 inches; loam
Bs—10 to 16 inches; fine sandy loam
2E/Bx—16 to 26 inches; fine sandy loam
2B/Ex—26 to 54 inches; silt loam
2BC—54 to 70 inches; fine sandy loam
2C—70 to 80 inches; fine sandy loam

Soil Properties and Qualities

Parent material: Loamy eolian deposits over coarse-loamy till
Slope: 18 to 35 percent
Hazard of soil blowing: Slight
Surface runoff class: Very high
Potential for frost action: Moderate
Depth to restrictive feature: 15 to 24 inches to a fragipan
Drainage class: Moderately well drained
Available water capacity: 13.8 inches (very high)
Shrink-swell potential: Moderate
Permeability: Very slow
Flooding: None
Depth to seasonal high water table: 1 to 2 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: 2.5a-a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Wildlife habitat, recreation

528B—Gogebic-Annalake complex, 1 to 6 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

48 percent Gogebic and similar soils
45 percent Annalake and similar soils
7 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; silt loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam

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2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
2C—68 to 80 inches; gravelly fine sandy loam

Annalake

A—0 to 9 inches; very fine sandy loam
Bs—9 to 16 inches; fine sandy loam
E and Bt1—16 to 31 inches; stratified loamy very fine sand to silt loam to loamy fine sand
E and Bt2—31 to 48 inches; stratified sand to fine sand to loamy fine sand to silt loam
Bt and E—48 to 61 inches; stratified sand to fine sand to loamy fine sand to silt loam
C—61 to 80 inches; stratified fine sand to loamy fine sand to silt loam to silt

Soil Properties and Qualities

Parent material: Gogebic—modified loamy eolian deposits over loamy till; Annalake—stratified loamy glaciofluvial deposits
Slope: 1 to 6 percent
Hazard of soil blowing: Moderate
Surface runoff class: Gogebic—medium; Annalake—low
Potential for frost action: Gogebic—moderate; Annalake—high
Depth to restrictive feature: Gogebic—20 inches to a fragipan; Annalake—more than 80 inches
Drainage class: Moderately well drained
Available water capacity: Gogebic—5.5 inches (low); Annalake—8.7 inches (moderate)
Shrink-swell potential: Moderate
Permeability: Gogebic—very slow; Annalake—moderate
Flooding: None
Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Annalake—1.5 to 6.0 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 2e
Michigan soil management group: Gogebic—3a-af; Annalake—3a-s
Habitat type: AVO

Major Uses

Dominant use: Forestland
Other uses: Cropland, pasture, wildlife habitat, recreation

528C—Gogebic-Annalake complex, 6 to 18 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

48 percent Gogebic and similar soils
45 percent Annalake and similar soils
7 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; silt loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
2C—68 to 80 inches; gravelly fine sandy loam

Annalake

A—0 to 9 inches; very fine sandy loam
Bs—9 to 16 inches; fine sandy loam
E and Bt1—16 to 31 inches; stratified loamy very fine sand to silt loam to loamy fine sand
E and Bt2—31 to 48 inches; stratified sand to fine sand to loamy fine sand to silt loam
Bt and E—48 to 61 inches; stratified sand to fine sand to loamy fine sand to silt loam
C—61 to 80 inches; stratified fine sand to loamy fine sand to silt loam to silt

Soil Properties and Qualities

Parent material: Gogebic—modified loamy eolian deposits over loamy till; Annalake—stratified loamy glaciofluvial deposits

Slope: 6 to 18 percent

Hazard of soil blowing: Moderate

Surface runoff class: Medium

Potential for frost action: Gogebic—moderate; Annalake—high

Depth to restrictive feature: Gogebic—20 inches to a fragipan; Annalake—more than 80 inches

Drainage class: Moderately well drained

Available water capacity: Gogebic—5.5 inches (low); Annalake—8.7 inches (moderate)

Shrink-swell potential: Moderate

Permeability: Gogebic—very slow; Annalake—moderate

Flooding: None

Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Annalake—1.5 to 6.0 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 4e

Michigan soil management group: Gogebic—3a-af; Annalake—3a-s

Habitat type: AVO

Major Uses

Dominant use: Forestland

Other uses: Cropland, pasture, wildlife habitat, recreation

528D—Gogebic-Annalake complex, 18 to 35 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

48 percent Gogebic and similar soils
45 percent Annalake and similar soils
7 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; silt loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
2C—68 to 80 inches; gravelly fine sandy loam

Annalake

A—0 to 9 inches; very fine sandy loam
Bs—9 to 16 inches; fine sandy loam
E and Bt1—16 to 31 inches; stratified loamy very fine sand to silt loam to loamy fine sand
E and Bt2—31 to 48 inches; stratified sand to fine sand to loamy fine sand to silt loam
Bt and E—48 to 61 inches; stratified sand to fine sand to loamy fine sand to silt loam
C—61 to 80 inches; stratified fine sand to loamy fine sand to silt loam to silt

Soil Properties and Qualities

Parent material: Gogebic—modified loamy eolian deposits over loamy till; Annalake—stratified loamy glaciofluvial deposits

Slope: 18 to 35 percent

Hazard of soil blowing: Moderate

Surface runoff class: High

Potential for frost action: Gogebic—moderate; Annalake—high

Depth to restrictive feature: Gogebic—20 inches to a fragipan; Annalake—more than 80 inches

Drainage class: Moderately well drained

Available water capacity: Gogebic—5.5 inches (low); Annalake—8.7 inches (moderate)

Shrink-swell potential: Moderate

Permeability: Gogebic—very slow; Annalake—moderate

Flooding: None

Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Annalake—1.5 to 6.0 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: Gogebic—3a-af; Annalake—3a-s

Habitat type: AVO

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

551B—Gogebic-Dishno complex, 1 to 6 percent slopes, rocky, very stony

Setting

Landform: Till plains

Average Map Unit Composition

65 percent Gogebic and similar soils

30 percent Dishno and similar soils

5 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; silt loam

E—5 to 8 inches; silt loam

Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam

2E/Bx—20 to 33 inches; gravelly fine sandy loam

2B/Ex—33 to 49 inches; fine sandy loam

2Bt—49 to 54 inches; fine sandy loam

2BC—54 to 68 inches; fine sandy loam

2C—68 to 80 inches; gravelly fine sandy loam

Dishno

Oe—0 to 1 inch; moderately decomposed plant material

A—1 to 3 inches; cobbly silt loam

E—3 to 9 inches; cobbly silt loam

Bhs—9 to 10 inches; cobbly loam

Bs1—10 to 18 inches; cobbly fine sandy loam

Bs2—18 to 22 inches; cobbly loamy sand

2BC—22 to 29 inches; very stony loamy sand

2C—29 to 46 inches; very stony loamy sand

3R—46 inches; bedrock

Soil Properties and Qualities

Parent material: Gogebic—modified loamy eolian deposits over loamy till; Dishno—loamy eolian deposits over coarse-loamy till

Slope: 1 to 6 percent

Hazard of soil blowing: Gogebic—slight; Dishno—moderate

Surface runoff class: Gogebic—medium; Dishno—low

Potential for frost action: Moderate

Depth to restrictive feature: Gogebic—20 inches to a fragipan; Dishno—40 to 60 inches to lithic bedrock

Drainage class: Moderately well drained

Available water capacity: 5.3 to 5.5 inches (low)

Shrink-swell potential: Gogebic—moderate; Dishno—low

Permeability: Gogebic—very slow; Dishno—moderate

Flooding: None

Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Dishno—1.0 to 3.8 feet (April, October)

Ponding: None

Interpretive Groups

Land capability classification: 6s

Michigan soil management group: Gogebic—3a-af; Dishno—3a

Habitat type: Gogebic—AVO; Dishno—ATD

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

566—Beach, rubbly, very rocky

Average Map Unit Composition

95 percent Beach, rubbly

5 percent components of minor extent

Interpretive Groups

Land capability classification: 7s

Michigan soil management group: None assigned

Habitat type: None assigned

Major Uses

Dominant use: Wildlife habitat

Other uses: Forestland, recreation

576B—Flintsteel-Loggerhead complex, 1 to 6 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

45 percent Flintsteel and similar soils

40 percent Loggerhead and similar soils

15 percent components of minor extent

Typical Profile

Flintsteel

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; fine sandy loam

E—5 to 9 inches; loam

Bw—9 to 12 inches; fine sandy loam

E/B—12 to 16 inches; loam
B/E—16 to 22 inches; loam
Bt—22 to 36 inches; silt loam
BCd—36 to 48 inches; silt loam
Cd—48 to 80 inches; silt loam

Loggerhead

A—0 to 4 inches; loam
E—4 to 5 inches; fine sandy loam
Bs—5 to 15 inches; loam
E/B—15 to 38 inches; gravelly fine sandy loam
2B/E—38 to 56 inches; fine sandy loam
2Bt—56 to 80 inches; loam

Soil Properties and Qualities

Parent material: Flintsteel—fine-loamy till; Loggerhead—coarse-loamy till over loamy till

Slope: 1 to 6 percent

Hazard of soil blowing: Flintsteel—slight; Loggerhead—moderate

Surface runoff class: Flintsteel—low; Loggerhead—medium

Potential for frost action: Moderate

Depth to restrictive feature: Flintsteel—36 inches to dense material; Loggerhead—more than 80 inches

Drainage class: Moderately well drained

Available water capacity: Flintsteel—8.6 inches (moderate); Loggerhead—9.1 inches (high)

Shrink-swell potential: Moderate

Permeability: Moderately slow

Flooding: None

Depth to seasonal high water table: 1.5 to 6.7 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 2e

Michigan soil management group: Flintsteel—2.5a; Loggerhead—3/2a

Habitat type: Flintsteel—TAM; Loggerhead—ATD

Major Uses

Dominant use: Forestland

Other uses: Cropland, pasture, wildlife habitat, recreation

576C—Flintsteel-Loggerhead complex, 6 to 18 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

45 percent Flintsteel and similar soils
40 percent Loggerhead and similar soils
15 percent components of minor extent

Typical Profile

Flintsteel

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; fine sandy loam
E—5 to 9 inches; loam
Bw—9 to 12 inches; fine sandy loam
E/B—12 to 16 inches; loam
B/E—16 to 22 inches; loam
Bt—22 to 36 inches; silt loam
BCd—36 to 48 inches; silt loam
Cd—48 to 80 inches; silt loam

Loggerhead

A—0 to 4 inches; loam
E—4 to 5 inches; fine sandy loam
Bs—5 to 15 inches; loam
E/B—15 to 38 inches; gravelly fine sandy loam
2B/E—38 to 56 inches; fine sandy loam
2Bt—56 to 80 inches; loam

Soil Properties and Qualities

Parent material: Flintsteel—fine-loamy till; Loggerhead—coarse-loamy till over loamy till

Slope: 6 to 18 percent

Hazard of soil blowing: Flintsteel—slight; Loggerhead—moderate

Surface runoff class: Flintsteel—medium; Loggerhead—high

Potential for frost action: Moderate

Depth to restrictive feature: Flintsteel—36 inches to dense material; Loggerhead—more than 80 inches

Drainage class: Moderately well drained

Available water capacity: Flintsteel—8.6 inches (moderate); Loggerhead—9.1 inches (high)

Shrink-swell potential: Moderate

Permeability: Moderately slow

Flooding: None

Depth to seasonal high water table: 1.5 to 6.7 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 3e

Michigan soil management group: Flintsteel—2.5a; Loggerhead—3/2a

Habitat type: Flintsteel—TAM; Loggerhead—ATD

Major Uses

Dominant use: Forestland

Other uses: Cropland, pasture, wildlife habitat, recreation

576D—Flintsteel-Loggerhead complex, 18 to 35 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

45 percent Flintsteel and similar soils
40 percent Loggerhead and similar soils
15 percent components of minor extent

Typical Profile

Flintsteel

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; fine sandy loam
E—5 to 9 inches; loam
Bw—9 to 12 inches; fine sandy loam
E/B—12 to 16 inches; loam
B/E—16 to 22 inches; loam
Bt—22 to 36 inches; silt loam
BCd—36 to 48 inches; silt loam
Cd—48 to 80 inches; silt loam

Loggerhead

A—0 to 4 inches; loam
E—4 to 5 inches; fine sandy loam
Bs—5 to 15 inches; loam
E/B—15 to 38 inches; gravelly fine sandy loam
2B/E—38 to 56 inches; fine sandy loam
2Bt—56 to 80 inches; loam

Soil Properties and Qualities

Parent material: Flintsteel—fine-loamy till; Loggerhead—coarse-loamy till over loamy till

Slope: 18 to 35 percent

Hazard of soil blowing: Flintsteel—slight; Loggerhead—moderate

Surface runoff class: High

Potential for frost action: Moderate

Depth to restrictive feature: Flintsteel—36 inches to dense material; Loggerhead—more than 80 inches

Drainage class: Moderately well drained

Available water capacity: Flintsteel—8.6 inches (moderate); Loggerhead—9.1 inches (high)

Shrink-swell potential: Moderate

Permeability: Moderately slow

Flooding: None

Depth to seasonal high water table: 1.5 to 6.7 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: Flintsteel—2.5a; Loggerhead—3/2a

Habitat type: Flintsteel—TAM; Loggerhead—ATD

Major Uses

Dominant use: Forestland

Other uses: Cropland, pasture, wildlife habitat, recreation

577B—Loggerhead-Chabeneau-Arcadian complex, 1 to 6 percent slopes, rocky

Setting

Landform: Till plains

Average Map Unit Composition

35 percent Loggerhead and similar soils
30 percent Chabeneau and similar soils
25 percent Arcadian and similar soils
10 percent components of minor extent

Typical Profile

Loggerhead

A—0 to 4 inches; loam
E—4 to 5 inches; fine sandy loam
Bs—5 to 15 inches; loam
E/B—15 to 38 inches; gravelly fine sandy loam
2B/E—38 to 56 inches; fine sandy loam
2Bt—56 to 80 inches; loam

Chabeneau

Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 2 inches; silt loam
E—2 to 5 inches; silt loam
Bs1—5 to 10 inches; silt loam
Bs2—10 to 22 inches; silt loam
2BC—22 to 30 inches; gravelly loamy sand
2C1—30 to 48 inches; stratified coarse sand to very gravelly coarse sand
2C2—48 to 121 inches; stratified sand to gravelly sand

Arcadian

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 5 inches; very gravelly fine sandy loam
Bhs—5 to 12 inches; very gravelly fine sandy loam
2R—12 inches; unweathered bedrock

Soil Properties and Qualities

Parent material: Loggerhead—coarse-loamy till over loamy till; Chabeneau—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits;
Arcadian—loamy-skeletal drift over conglomerate and/or basalt

Slope: 1 to 6 percent

Hazard of soil blowing: Loggerhead—moderate; Chabeneau and Arcadian—slight

Surface runoff class: Loggerhead—medium; Chabeneau and Arcadian—low

Potential for frost action: Moderate

Depth to restrictive feature: Loggerhead and Chabeneau—more than 80 inches;
Arcadian—10 to 20 inches to lithic bedrock

Drainage class: Loggerhead and Chabeneau—moderately well drained; Arcadian—well drained

Available water capacity: Loggerhead—9.1 inches (high); Chabeneau—5.7 inches (low); Arcadian—1.7 inches (very low)

Shrink-swell potential: Loggerhead—moderate; Chabeneau and Arcadian—low

Permeability: Loggerhead—moderately slow; Chabeneau and Arcadian—moderate

Flooding: None

Depth to seasonal high water table: Loggerhead—1.5 to 6.7 feet (April);
Chabeneau—2 to 7 feet (April, May); Arcadian—more than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 2s

Michigan soil management group: Loggerhead—3/2a; Chabeneau—3/5a; Arcadian—
Ra

Habitat type: Loggerhead—ATD; Chabeneau—TMC-V; Arcadian—AVO

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

577C—Loggerhead-Chabeneau-Arcadian complex, 6 to 18 percent slopes, rocky

Setting

Landform: Till plains

Average Map Unit Composition

35 percent Loggerhead and similar soils

30 percent Chabeneau and similar soils

25 percent Arcadian and similar soils

10 percent components of minor extent

Typical Profile

Loggerhead

A—0 to 4 inches; loam

E—4 to 5 inches; fine sandy loam

Bs—5 to 15 inches; loam

E/B—15 to 38 inches; gravelly fine sandy loam

2B/E—38 to 56 inches; fine sandy loam

2Bt—56 to 80 inches; loam

Chabeneau

Oe—0 to 1 inch; moderately decomposed plant material

A—1 to 2 inches; silt loam

E—2 to 5 inches; silt loam

Bs1—5 to 10 inches; silt loam

Bs2—10 to 22 inches; silt loam

2BC—22 to 30 inches; gravelly loamy sand

2C1—30 to 48 inches; stratified coarse sand to very gravelly coarse sand

2C2—48 to 121 inches; stratified sand to gravelly sand

Arcadian

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 5 inches; very gravelly fine sandy loam

Bhs—5 to 12 inches; very gravelly fine sandy loam

2R—12 inches; unweathered bedrock

Soil Properties and Qualities

Parent material: Loggerhead—coarse-loamy till over loamy till; Chabeneau—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits;

Arcadian—loamy-skeletal drift over conglomerate and/or basalt

Slope: 6 to 18 percent

Hazard of soil blowing: Loggerhead—moderate; Chabeneau and Arcadian—slight

Surface runoff class: Loggerhead—high; Chabeneau and Arcadian—medium

Potential for frost action: Moderate

Depth to restrictive feature: Loggerhead and Chabeneau—more than 80 inches;

Arcadian—10 to 20 inches to lithic bedrock

Drainage class: Loggerhead and Chabeneau—moderately well drained; Arcadian—well drained

Available water capacity: Loggerhead—9.1 inches (high); Chabeneau—5.7 inches (low); Arcadian—1.7 inches (very low)

Shrink-swell potential: Loggerhead—moderate; Chabeneau and Arcadian—low

Permeability: Loggerhead—moderately slow; Chabeneau and Arcadian—moderate

Flooding: None

Depth to seasonal high water table: Loggerhead—1.5 to 6.7 feet (April);

Chabeneau—2 to 7 feet (April, May); Arcadian—more than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 3e

Michigan soil management group: Loggerhead—3/2a; Chabeneau—3/5a; Arcadian—Ra

Habitat type: Loggerhead—ATD; Chabeneau—TMC-V; Arcadian—AVO

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

577D—Loggerhead-Chabeneau-Arcadian complex, 18 to 35 percent slopes, rocky

Setting

Landform: Till plains

Average Map Unit Composition

35 percent Loggerhead and similar soils

30 percent Chabeneau and similar soils

25 percent Arcadian and similar soils

10 percent components of minor extent

Typical Profile

Loggerhead

A—0 to 4 inches; loam

E—4 to 5 inches; fine sandy loam

Bs—5 to 15 inches; loam

E/B—15 to 38 inches; gravelly fine sandy loam

2B/E—38 to 56 inches; fine sandy loam

2Bt—56 to 80 inches; loam

Chabeneau

Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 2 inches; silt loam
E—2 to 5 inches; silt loam
Bs1—5 to 10 inches; silt loam
Bs2—10 to 22 inches; silt loam
2BC—22 to 30 inches; gravelly loamy sand
2C1—30 to 48 inches; stratified coarse sand to very gravelly coarse sand
2C2—48 to 121 inches; stratified sand to gravelly sand

Arcadian

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 5 inches; very gravelly fine sandy loam
Bhs—5 to 12 inches; very gravelly fine sandy loam
2R—12 inches; unweathered bedrock

Soil Properties and Qualities

Parent material: Loggerhead—coarse-loamy till over loamy till; Chabeneau—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits; Arcadian—loamy-skeletal drift over conglomerate and/or basalt
Slope: 18 to 35 percent
Hazard of soil blowing: Loggerhead—moderate; Chabeneau and Arcadian—slight
Surface runoff class: Loggerhead and Arcadian—high; Chabeneau—medium
Potential for frost action: Moderate
Depth to restrictive feature: Loggerhead and Chabeneau—more than 80 inches; Arcadian—10 to 20 inches to lithic bedrock
Drainage class: Loggerhead and Chabeneau—moderately well drained; Arcadian—well drained
Available water capacity: Loggerhead—9.1 inches (high); Chabeneau—5.7 inches (low); Arcadian—1.7 inches (very low)
Shrink-swell potential: Loggerhead—moderate; Chabeneau and Arcadian—low
Permeability: Loggerhead—moderately slow; Chabeneau and Arcadian—moderate
Flooding: None
Depth to seasonal high water table: Loggerhead—1.5 to 6.7 feet (April); Chabeneau—2 to 7 feet (April, May); Arcadian—more than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 4e
Michigan soil management group: Loggerhead—3/2a; Chabeneau—3/5a; Arcadian—Ra
Habitat type: Loggerhead—ATD; Chabeneau—TMC-V; Arcadian—AVO

Major Uses

Dominant use: Forestland
Other uses: Wildlife habitat, recreation

578D—Arcadian-Keweenaw complex, lake bench, 6 to 35 percent slopes, rocky

Setting

Landform: Hills and escarpments on benches

Average Map Unit Composition

59 percent Arcadian and similar soils
40 percent Keweenaw and similar soils
1 percent components of minor extent

Typical Profile

Arcadian

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 5 inches; very gravelly fine sandy loam
Bhs—5 to 12 inches; very gravelly fine sandy loam
2R—12 inches; unweathered bedrock

Keweenaw

Oa—0 to 2 inches; highly decomposed plant material
E—2 to 4 inches; sandy loam
Bhs—4 to 6 inches; loamy fine sand
Bs—6 to 25 inches; loamy fine sand
E/B—25 to 45 inches; stratified sand to fine sand to loamy fine sand to loamy very fine sand
B/E—45 to 56 inches; stratified loamy fine sand to fine sand to fine sandy loam
E/B'—56 to 71 inches; stratified loamy fine sand to fine sand to fine sandy loam
B/E'—71 to 90 inches; stratified loamy fine sand to fine sandy loam

Soil Properties and Qualities

Parent material: Arcadian—loamy-skeletal drift over conglomerate and/or basalt;
Keweenaw—sandy drift
Slope: 6 to 35 percent
Hazard of soil blowing: Arcadian—slight; Keweenaw—moderate
Surface runoff class: Arcadian—high; Keweenaw—medium
Potential for frost action: Arcadian—moderate; Keweenaw—low
Depth to restrictive feature: Arcadian—10 to 20 inches to lithic bedrock; Keweenaw—more than 80 inches
Drainage class: Well drained
Available water capacity: Arcadian—1.7 inches (very low); Keweenaw—3.7 inches (low)
Shrink-swell potential: Low
Permeability: Moderate
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7s
Michigan soil management group: Arcadian—Ra; Keweenaw—4a-a
Habitat type: Arcadian—AVO; Keweenaw—ATD-D

Major Uses

Dominant use: Forestland
Other uses: Wildlife habitat, recreation

625B—Fence very fine sandy loam, 0 to 6 percent slopes

Setting

Landform: Lake plains; lake terraces

Average Map Unit Composition

95 percent Fence and similar soils
5 percent components of minor extent

Typical Profile

Fence

A—0 to 6 inches; very fine sandy loam
E—6 to 7 inches; silt loam
Bs—7 to 13 inches; silt loam
E'—13 to 15 inches; silt loam
B/E1—15 to 20 inches; silt loam
B/E2—20 to 35 inches; silt loam
C—35 to 80 inches; stratified silt loam to silt

Soil Properties and Qualities

Parent material: Coarse-silty glaciolacustrine deposits
Slope: 0 to 6 percent
Hazard of soil blowing: Slight
Surface runoff class: Low
Potential for frost action: High
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Available water capacity: 12 inches (high)
Shrink-swell potential: Low
Permeability: Moderately slow
Flooding: None
Depth to seasonal high water table: 1.5 to 7.0 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 2e
Michigan soil management group: 3a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Cropland, pasture, wildlife habitat, recreation

625C—Fence very fine sandy loam, 6 to 18 percent slopes

Setting

Landform: Lake plains; lake terraces

Average Map Unit Composition

98 percent Fence and similar soils
2 percent components of minor extent

Typical Profile

Fence

A—0 to 6 inches; very fine sandy loam
E—6 to 7 inches; silt loam
Bs—7 to 13 inches; silt loam
E'—13 to 15 inches; silt loam
B/E1—15 to 20 inches; silt loam
B/E2—20 to 35 inches; silt loam
C—35 to 80 inches; stratified silt loam to silt

Soil Properties and Qualities

Parent material: Coarse-silty glaciolacustrine deposits
Slope: 6 to 18 percent
Hazard of soil blowing: Slight
Surface runoff class: Medium
Potential for frost action: High
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Available water capacity: 12 inches (high)
Shrink-swell potential: Low
Permeability: Moderately slow
Flooding: None
Depth to seasonal high water table: 1.5 to 7.0 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 4e
Michigan soil management group: 3a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Cropland, pasture, wildlife habitat, recreation

626D—Sporley very fine sandy loam, 18 to 35 percent slopes

Setting

Landform: Escarpments on lake plains

Average Map Unit Composition

85 percent Sporley and similar soils
15 percent components of minor extent

Typical Profile

Sporley

A—0 to 6 inches; very fine sandy loam
E—6 to 7 inches; silt loam
Bs—7 to 12 inches; silt loam
E'—12 to 15 inches; silt loam
E/B—15 to 24 inches; silt loam

B/E—24 to 30 inches; stratified silt loam to silty clay loam
BC—30 to 80 inches; stratified very fine sandy loam to silt loam to silt

Soil Properties and Qualities

Parent material: Stratified loamy and silty glaciolacustrine deposits
Slope: 18 to 35 percent
Hazard of soil blowing: Slight
Surface runoff class: High
Potential for frost action: High
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Available water capacity: 12.4 inches (very high)
Shrink-swell potential: Moderate
Permeability: Moderately slow
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: 2.5a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Wildlife habitat, recreation

626E—Sporley very fine sandy loam, 35 to 55 percent slopes

Setting

Landform: Escarpments on lake plains

Average Map Unit Composition

90 percent Sporley and similar soils
10 percent components of minor extent

Typical Profile

Sporley

A—0 to 6 inches; very fine sandy loam
E—6 to 7 inches; silt loam
Bs—7 to 12 inches; silt loam
E'—12 to 15 inches; silt loam
E/B—15 to 24 inches; silt loam
B/E—24 to 30 inches; stratified silt loam to silty clay loam
BC—30 to 80 inches; stratified very fine sandy loam to silt loam to silt

Soil Properties and Qualities

Parent material: Stratified loamy and silty glaciolacustrine deposits
Slope: 35 to 55 percent
Hazard of soil blowing: Slight
Surface runoff class: Very high
Potential for frost action: High

Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Available water capacity: 12.4 inches (very high)
Shrink-swell potential: Moderate
Permeability: Moderately slow
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: 2.5a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Wildlife habitat, recreation

648B—Annalake very fine sandy loam, 0 to 6 percent slopes

Setting

Landform: Deltas; lake plains

Average Map Unit Composition

93 percent Annalake and similar soils
7 percent components of minor extent

Typical Profile

Annalake

A—0 to 9 inches; very fine sandy loam
Bs—9 to 16 inches; fine sandy loam
E and Bt1—16 to 31 inches; stratified loamy very fine sand to silt loam to loamy fine sand
E and Bt2—31 to 48 inches; stratified sand to fine sand to loamy fine sand to silt loam
Bt and E—48 to 61 inches; stratified sand to fine sand to loamy fine sand to silt loam
C—61 to 80 inches; stratified fine sand to loamy fine sand to silt loam to silt

Soil Properties and Qualities

Parent material: Stratified loamy glaciofluvial deposits
Slope: 0 to 6 percent
Hazard of soil blowing: Moderate
Surface runoff class: Low
Potential for frost action: High
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Available water capacity: 8.7 inches (moderate)
Shrink-swell potential: Moderate
Permeability: Moderate
Flooding: None
Depth to seasonal high water table: 1.5 to 6.0 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 2e
Michigan soil management group: 3a-s
Habitat type: AVO

Major Uses

Dominant use: Forestland
Other uses: Cropland, pasture, wildlife habitat, recreation

648C—Annalake very fine sandy loam, 6 to 18 percent slopes

Setting

Landform: Deltas; lake plains

Average Map Unit Composition

93 percent Annalake and similar soils
7 percent components of minor extent

Typical Profile

Annalake

A—0 to 9 inches; very fine sandy loam
Bs—9 to 16 inches; fine sandy loam
E and Bt1—16 to 31 inches; stratified loamy very fine sand to silt loam to loamy fine sand
E and Bt2—31 to 48 inches; stratified sand to fine sand to loamy fine sand to silt loam
Bt and E—48 to 61 inches; stratified sand to fine sand to loamy fine sand to silt loam
C—61 to 80 inches; stratified fine sand to loamy fine sand to silt loam to silt

Soil Properties and Qualities

Parent material: Stratified loamy glaciofluvial deposits
Slope: 6 to 18 percent
Hazard of soil blowing: Moderate
Surface runoff class: Medium
Potential for frost action: High
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Available water capacity: 8.7 inches (moderate)
Shrink-swell potential: Moderate
Permeability: Moderate
Flooding: None
Depth to seasonal high water table: 1.5 to 6.0 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 4e
Michigan soil management group: 3a-s
Habitat type: AVO

Major Uses

Dominant use: Forestland
Other uses: Cropland, pasture, wildlife habitat, recreation

650—Leafriver muck, 0 to 1 percent slopes

Setting

Landform: Fluvial terraces

Average Map Unit Composition

90 percent Leafriver and similar soils
10 percent components of minor extent

Typical Profile

Leafriver

Oi—0 to 1 inch; slightly decomposed plant material
Oa—1 to 14 inches; muck
Cg—14 to 16 inches; loamy sand
C—16 to 51 inches; sand, gravelly coarse sand

Soil Properties and Qualities

Parent material: Sandy glaciofluvial deposits

Slope: 0 to 1 percent

Hazard of soil blowing: Moderate

Surface runoff class: Negligible

Potential for frost action: Moderate

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Available water capacity: 1.3 inches (very low)

Shrink-swell potential: Moderate

Permeability: Rapid

Flooding: None

Depth to seasonal high water table: At the surface (January, February, March, April, May, October, November, December)

Depth and months of deepest ponding: 0.2 foot (March, April, May, October, November)

Months in which ponding does not occur: January, February, June, July, August, September, December

Interpretive Groups

Land capability classification: 6w

Michigan soil management group: 5c

Habitat type: F1

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

652B—Manido-Annalake complex, 1 to 6 percent slopes

Setting

Landform: Till-floored lake plains

Average Map Unit Composition

52 percent Manido and similar soils
24 percent Annalake and similar soils
24 percent components of minor extent

Typical Profile

Manido

Oe—0 to 3 inches; moderately decomposed plant material
E—3 to 9 inches; fine sand
Bhs—9 to 11 inches; fine sand
Bs—11 to 17 inches; fine sand
BC—17 to 37 inches; fine sand
E and Bt—37 to 60 inches; stratified fine sand to sand to very fine sand
C—60 to 80 inches; stratified fine sand to sand to very fine sand

Annalake

A—0 to 9 inches; very fine sandy loam
Bs—9 to 16 inches; fine sandy loam
E and Bt1—16 to 31 inches; stratified loamy very fine sand to silt loam to loamy fine sand
E and Bt2—31 to 48 inches; stratified sand to fine sand to loamy fine sand to silt loam
Bt and E—48 to 61 inches; stratified sand to fine sand to loamy fine sand to silt loam
C—61 to 80 inches; stratified fine sand to loamy fine sand to silt loam to silt

Soil Properties and Qualities

Parent material: Manido—sandy outwash; Annalake—stratified loamy glaciofluvial deposits

Slope: 1 to 6 percent

Hazard of soil blowing: Manido—severe; Annalake—moderate

Surface runoff class: Manido—very low; Annalake—low

Potential for frost action: Manido—low; Annalake—high

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Available water capacity: Manido—5.6 inches (low); Annalake—8.7 inches (moderate)

Shrink-swell potential: Manido—low; Annalake—moderate

Permeability: Manido—moderately rapid; Annalake—moderate

Flooding: None

Depth to seasonal high water table: Manido—2.0 to 6.7 feet (March); Annalake—1.5 to 6.0 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 4s

Michigan soil management group: Manido—5a; Annalake—3a-s

Habitat type: Manido—TMC-D; Annalake—ATD

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

656B—Stutts-Zandi complex, 1 to 6 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

60 percent Stutts and similar soils

30 percent Zandi and similar soils
10 percent components of minor extent

Typical Profile

Stutts

Oe—0 to 1 inch; moderately decomposed plant material
E—1 to 6 inches; loamy fine sand
Bhs—6 to 8 inches; loamy fine sand
Bs1—8 to 15 inches; loamy fine sand
Bs2—15 to 18 inches; fine sand
BC—18 to 28 inches; fine sand
C—28 to 80 inches; fine sand

Zandi

Oe—0 to 0.5 inch; moderately decomposed plant material
E—0.5 inch to 4 inches; loamy very fine sand
Bhs—4 to 6 inches; loamy very fine sand
Bs—6 to 34 inches; very fine sandy loam
E/B—34 to 42 inches; stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam
B/E—42 to 57 inches; stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam
E and Bt—57 to 80 inches; stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam

Soil Properties and Qualities

Parent material: Stutts—sandy glaciofluvial deposits; Zandi—coarse-loamy glaciolacustrine deposits
Slope: 1 to 6 percent
Hazard of soil blowing: Moderate
Surface runoff class: Low
Potential for frost action: Stutts—low; Zandi—moderate
Depth to restrictive feature: More than 80 inches
Drainage class: Stutts—somewhat excessively drained; Zandi—well drained
Available water capacity: Stutts—4.5 inches (low); Zandi—8.5 inches (moderate)
Shrink-swell potential: Low
Permeability: Stutts—moderately rapid; Zandi—moderate
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 3s
Michigan soil management group: Stutts—4a; Zandi—3a-s
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Wildlife habitat, recreation

656C—Stutts-Zandi complex, 6 to 18 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

60 percent Stutts and similar soils
30 percent Zandi and similar soils
10 percent components of minor extent

Typical Profile

Stutts

Oe—0 to 1 inch; moderately decomposed plant material
E—1 to 6 inches; loamy fine sand
Bhs—6 to 8 inches; loamy fine sand
Bs1—8 to 15 inches; loamy fine sand
Bs2—15 to 18 inches; fine sand
BC—18 to 28 inches; fine sand
C—28 to 80 inches; fine sand

Zandi

Oe—0 to 0.5 inch; moderately decomposed plant material
E—0.5 inch to 4 inches; loamy very fine sand
Bhs—4 to 6 inches; loamy very fine sand
Bs—6 to 34 inches; very fine sandy loam
E/B—34 to 42 inches; stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam
B/E—42 to 57 inches; stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam
E and Bt—57 to 80 inches; stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam

Soil Properties and Qualities

Parent material: Stutts—sandy glaciofluvial deposits; Zandi—coarse-loamy glaciolacustrine deposits
Slope: 6 to 18 percent
Hazard of soil blowing: Moderate
Surface runoff class: Low
Potential for frost action: Stutts—low; Zandi—moderate
Depth to restrictive feature: More than 80 inches
Drainage class: Stutts—somewhat excessively drained; Zandi—well drained
Available water capacity: Stutts—4.5 inches (low); Zandi—8.5 inches (moderate)
Shrink-swell potential: Low
Permeability: Stutts—moderately rapid; Zandi—moderate
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 4e
Michigan soil management group: Stutts—4a; Zandi—3a-s
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Wildlife habitat, recreation

656D—Stutts-Zandi complex, 18 to 35 percent slopes

Setting

Landform: Outwash plains

Average Map Unit Composition

60 percent Stutts and similar soils
30 percent Zandi and similar soils
10 percent components of minor extent

Typical Profile

Stutts

Oe—0 to 1 inch; moderately decomposed plant material
E—1 to 6 inches; loamy fine sand
Bhs—6 to 8 inches; loamy fine sand
Bs1—8 to 15 inches; loamy fine sand
Bs2—15 to 18 inches; fine sand
BC—18 to 28 inches; fine sand
C—28 to 80 inches; fine sand

Zandi

Oe—0 to 0.5 inch; moderately decomposed plant material
E—0.5 inch to 4 inches; loamy very fine sand
Bhs—4 to 6 inches; loamy very fine sand
Bs—6 to 34 inches; very fine sandy loam
E/B—34 to 42 inches; stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam
B/E—42 to 57 inches; stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam
E and Bt—57 to 80 inches; stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam

Soil Properties and Qualities

Parent material: Stutts—sandy glaciofluvial deposits; Zandi—coarse-loamy glaciolacustrine deposits

Slope: 18 to 35 percent

Hazard of soil blowing: Moderate

Surface runoff class: Stutts—medium; Zandi—high

Potential for frost action: Stutts—low; Zandi—moderate

Depth to restrictive feature: More than 80 inches

Drainage class: Stutts—somewhat excessively drained; Zandi—well drained

Available water capacity: Stutts—4.5 inches (low); Zandi—8.5 inches (moderate)

Shrink-swell potential: Low

Permeability: Stutts—moderately rapid; Zandi—moderate

Flooding: None

Depth to seasonal high water table: More than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: Stutts—4a; Zandi—3a-s

Habitat type: ATD

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

680B—Tonkey-Pleine-Annalake complex, 0 to 1 percent slopes

Setting

Landform: Depressions on till plains

Average Map Unit Composition

37 percent Tonkey and similar soils

32 percent Pleine and similar soils

20 percent Annalake and similar soils

11 percent components of minor extent

Typical Profile

Tonkey

A1—0 to 6 inches; mucky silt loam

A2—6 to 9 inches; stratified fine sandy loam to silt loam

Bw—9 to 18 inches; stratified sandy loam to fine sandy loam

Bg—18 to 28 inches; stratified sandy loam to fine sandy loam

B'w—28 to 37 inches; stratified loam to silt loam

BC—37 to 67 inches; sandy loam

C—67 to 80 inches; stratified sandy loam to silt loam

Pleine

Oa—0 to 9 inches; very cobbly muck

Bg—9 to 20 inches; very fine sandy loam

Bw—20 to 33 inches; fine sandy loam

C—33 to 80 inches; gravelly sandy loam

Annalake

A—0 to 9 inches; very fine sandy loam

Bs—9 to 16 inches; fine sandy loam

E and Bt1—16 to 31 inches; stratified loamy very fine sand to silt loam to loamy fine sand

E and Bt2—31 to 48 inches; stratified sand to fine sand to loamy fine sand to silt loam

Bt and E—48 to 61 inches; stratified sand to fine sand to loamy fine sand to silt loam

C—61 to 80 inches; stratified fine sand to loamy fine sand to silt loam to silt

Soil Properties and Qualities

Parent material: Tonkey—stratified loamy and sandy glaciofluvial deposits; Pleine—coarse-loamy till; Annalake—stratified loamy glaciofluvial deposits

Slope: 0 to 1 percent

Hazard of soil blowing: Slight

Surface runoff class: Tonkey—negligible; Pleine—very low; Annalake—low

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Tonkey and Pleine—poorly drained; Annalake—moderately well drained

Available water capacity: Tonkey and Pleine—9.2 to 11.7 inches (high); Annalake—8.7 inches (moderate)

Soil Survey of Gogebic County, Michigan

Shrink-swell potential: Tonkey and Annalake—moderate; Pleine—low

Permeability: Tonkey—moderately rapid; Pleine and Annalake—moderate

Flooding: None

Depth to seasonal high water table: Tonkey—at the surface (January, February, March, April, May, October, November, December); Pleine—at the surface (January, February, March, April, May, November, December); Annalake—1.5 to 6.0 feet (April)

Depth and months of deepest ponding: Tonkey—0.5 foot (January, February, March, April, May, October, November, December); Pleine—0.2 foot (March, April, May, June, October, November); Annalake—none

Months in which ponding does not occur: Tonkey—June, July, August, September; Pleine—January, February, July, August, September, December

Interpretive Groups

Land capability classification: 5w

Michigan soil management group: Tonkey—3c-s; Pleine—3c; Annalake—3a-s

Habitat type: Tonkey—TMC; Pleine—FI; Annalake—ATD

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

681—Cathro-Tonkey complex, 0 to 1 percent slopes

Setting

Landform: Swamps, depressions, and drainageways on moraines

Average Map Unit Composition

45 percent Cathro and similar soils

37 percent Tonkey and similar soils

18 percent components of minor extent

Typical Profile

Cathro

Oa1—0 to 6 inches; muck

Oa2—6 to 31 inches; muck

Cg—31 to 80 inches; fine sandy loam

Tonkey

A1—0 to 6 inches; mucky silt loam

A2—6 to 9 inches; stratified fine sandy loam to silt loam

Bw—9 to 18 inches; stratified sandy loam to fine sandy loam

Bg—18 to 28 inches; stratified sandy loam to fine sandy loam

B'w—28 to 37 inches; stratified loam to silt loam

BC—37 to 67 inches; sandy loam

C—67 to 80 inches; stratified sandy loam to silt loam

Soil Properties and Qualities

Parent material: Cathro—herbaceous material over loamy drift; Tonkey—stratified loamy and sandy glaciofluvial deposits

Slope: 0 to 1 percent

Hazard of soil blowing: Cathro—moderate; Tonkey—slight

Surface runoff class: Negligible

Potential for frost action: High

Soil Survey of Gogebic County, Michigan

Depth to restrictive feature: More than 80 inches

Drainage class: Cathro—very poorly drained; Tonkey—poorly drained

Available water capacity: Cathro—16.5 inches (very high); Tonkey—9.2 inches (high)

Shrink-swell potential: Moderate

Permeability: Cathro—moderate; Tonkey—moderately rapid

Flooding: None

Depth to seasonal high water table: Cathro—at the surface (January, February, March, April, May, June, October, November, December); Tonkey—at the surface (January, February, March, April, May, October, November, December)

Depth and months of deepest ponding: Cathro—0.2 foot (March, April, May, June, October, November); Tonkey—0.5 foot (January, February, March, April, May, October, November, December)

Months in which ponding does not occur: Cathro—January, February, July, August, September, December; Tonkey—June, July, August, September

Interpretive Groups

Land capability classification: 6w

Michigan soil management group: Cathro—M/3c; Tonkey—3c-s

Habitat type: Cathro—TTM; Tonkey—TMC

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

683B—Amasa-Oldman complex, 1 to 6 percent slopes

Setting

Landform: Lake terraces; fluvial terraces

Average Map Unit Composition

45 percent Amasa and similar soils

40 percent Oldman and similar soils

15 percent components of minor extent

Typical Profile

Amasa

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 4 inches; cobbly silt loam

Bhs—4 to 7 inches; silt loam

Bs1—7 to 23 inches; very fine sandy loam

Bs2—23 to 28 inches; fine sandy loam

2C1—28 to 41 inches; sand

2C2—41 to 80 inches; very gravelly sand

Oldman

Oe—0 to 1 inch; gravelly moderately decomposed plant material

A—1 to 3 inches; very gravelly loam

Bhs—3 to 23 inches; extremely cobbly loam

B/Ex—23 to 28 inches; very gravelly fine sandy loam

Btx—28 to 43 inches; extremely bouldery fine sandy loam

Bx1—43 to 58 inches; extremely bouldery loamy fine sand

Bx2—58 to 80 inches; gravelly loamy fine sand

Soil Properties and Qualities

Parent material: Amasa—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits; Oldman—loamy till

Slope: 1 to 6 percent

Hazard of soil blowing: Slight

Surface runoff class: Amasa—low; Oldman—medium

Potential for frost action: Moderate

Depth to restrictive feature: Amasa—more than 80 inches; Oldman—23 inches to a fragipan

Drainage class: Amasa—well drained; Oldman—moderately well drained

Available water capacity: 5.3 to 5.9 inches (low)

Shrink-swell potential: Moderate

Permeability: Amasa—moderate; Oldman—very slow

Flooding: None

Depth to seasonal high water table: Amasa—more than 6.5 feet; Oldman—1.0 to 2.5 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 3s

Michigan soil management group: Amasa—3/5a-a; Oldman—Ga-f

Habitat type: AVO

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

683C—Amasa-Oldman complex, 6 to 18 percent slopes

Setting

Landform: Lake terraces; fluvial terraces

Average Map Unit Composition

45 percent Amasa and similar soils

40 percent Oldman and similar soils

15 percent components of minor extent

Typical Profile

Amasa

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 4 inches; cobbly silt loam

Bhs—4 to 7 inches; silt loam

Bs1—7 to 23 inches; very fine sandy loam

Bs2—23 to 28 inches; fine sandy loam

2C1—28 to 41 inches; sand

2C2—41 to 80 inches; very gravelly sand

Oldman

Oe—0 to 1 inch; gravelly moderately decomposed plant material

A—1 to 3 inches; very gravelly loam

Bhs—3 to 23 inches; extremely cobbly loam

B/Ex—23 to 28 inches; very gravelly fine sandy loam

Btx—28 to 43 inches; extremely bouldery fine sandy loam

Bx1—43 to 58 inches; extremely bouldery loamy fine sand

Bx2—58 to 80 inches; gravelly loamy fine sand

Soil Properties and Qualities

Parent material: Amasa—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits; Oldman—loamy till

Slope: 6 to 18 percent

Hazard of soil blowing: Slight

Surface runoff class: Medium

Potential for frost action: Moderate

Depth to restrictive feature: Amasa—more than 80 inches; Oldman—23 inches to a fragipan

Drainage class: Amasa—well drained; Oldman—moderately well drained

Available water capacity: 5.3 to 5.9 inches (low)

Shrink-swell potential: Moderate

Permeability: Amasa—moderate; Oldman—very slow

Flooding: None

Depth to seasonal high water table: Amasa—more than 6.5 feet; Oldman—1.0 to 2.5 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 6s

Michigan soil management group: Amasa—3/5a-a; Oldman—Ga-f

Habitat type: AVO

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

683D—Amasa-Oldman complex, 18 to 35 percent slopes

Setting

Landform: Eskers on till plains; stream terraces; kames

Average Map Unit Composition

45 percent Amasa and similar soils

40 percent Oldman and similar soils

15 percent components of minor extent

Typical Profile

Amasa

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 4 inches; cobbly silt loam

Bhs—4 to 7 inches; silt loam

Bs1—7 to 23 inches; very fine sandy loam

Bs2—23 to 28 inches; fine sandy loam

2C1—28 to 41 inches; sand

2C2—41 to 80 inches; very gravelly sand

Oldman

Oe—0 to 1 inch; gravelly moderately decomposed plant material

A—1 to 3 inches; very gravelly loam

Bhs—3 to 23 inches; extremely cobbly loam

B/Ex—23 to 28 inches; very gravelly fine sandy loam
Btx—28 to 43 inches; extremely bouldery fine sandy loam
Bx1—43 to 58 inches; extremely bouldery loamy fine sand
Bx2—58 to 80 inches; gravelly loamy fine sand

Soil Properties and Qualities

Parent material: Amasa—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits; Oldman—loamy till
Slope: 18 to 35 percent
Hazard of soil blowing: Slight
Surface runoff class: High
Potential for frost action: Moderate
Depth to restrictive feature: Amasa—more than 80 inches; Oldman—23 inches to a fragipan
Drainage class: Amasa—well drained; Oldman—moderately well drained
Available water capacity: 5.3 to 5.9 inches (low)
Shrink-swell potential: Moderate
Permeability: Amasa—moderate; Oldman—very slow
Flooding: None
Depth to seasonal high water table: Amasa—more than 6.5 feet; Oldman—1.0 to 2.5 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 7s
Michigan soil management group: Amasa—3/5a-a; Oldman—Ga-f
Habitat type: AVO

Major Uses

Dominant use: Forestland
Other uses: Wildlife habitat, recreation

684B—Amasa cobbly fine sandy loam, 1 to 6 percent slopes

Setting

Landform: Eskers; beach ridges

Average Map Unit Composition

70 percent Amasa and similar soils
30 percent components of minor extent

Typical Profile

Amasa

Oe—0 to 1 inch; moderately decomposed plant material
E—1 to 4 inches; cobbly fine sandy loam
Bhs—4 to 7 inches; silt loam
Bs1—7 to 23 inches; very fine sandy loam
Bs2—23 to 28 inches; fine sandy loam
2C1—28 to 41 inches; sand
2C2—41 to 80 inches; very gravelly sand

Soil Properties and Qualities

Parent material: Coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits
Slope: 1 to 6 percent
Hazard of soil blowing: Slight
Surface runoff class: Low
Potential for frost action: Moderate
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Available water capacity: 6.1 inches (moderate)
Shrink-swell potential: Moderate
Permeability: Moderate
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 2e
Michigan soil management group: 3/5a-a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Wildlife habitat, recreation

684C—Amasa cobbly fine sandy loam, 6 to 18 percent slopes

Setting

Landform: Kames; eskers on till plains

Average Map Unit Composition

78 percent Amasa and similar soils
22 percent components of minor extent

Typical Profile

Amasa

Oe—0 to 1 inch; moderately decomposed plant material
E—1 to 4 inches; cobbly fine sandy loam
Bhs—4 to 7 inches; silt loam
Bs1—7 to 23 inches; very fine sandy loam
Bs2—23 to 28 inches; fine sandy loam
2C1—28 to 41 inches; sand
2C2—41 to 80 inches; very gravelly sand

Soil Properties and Qualities

Parent material: Coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits
Slope: 6 to 18 percent
Hazard of soil blowing: Slight
Surface runoff class: Medium
Potential for frost action: Moderate

Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Available water capacity: 5.7 inches (low)
Shrink-swell potential: Moderate
Permeability: Moderate
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 3e
Michigan soil management group: 3/5a-a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Wildlife habitat, recreation

684D—Amasa cobbly fine sandy loam, 18 to 35 percent slopes

Setting

Landform: Kames; eskers on till plains

Average Map Unit Composition

78 percent Amasa and similar soils
22 percent components of minor extent

Typical Profile

Amasa

Oe—0 to 1 inch; moderately decomposed plant material
E—1 to 4 inches; cobbly fine sandy loam
Bhs—4 to 7 inches; silt loam
Bs1—7 to 23 inches; very fine sandy loam
Bs2—23 to 28 inches; fine sandy loam
2C1—28 to 41 inches; sand
2C2—41 to 80 inches; very gravelly sand

Soil Properties and Qualities

Parent material: Coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits
Slope: 18 to 35 percent
Hazard of soil blowing: Slight
Surface runoff class: High
Potential for frost action: Moderate
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Available water capacity: 5.7 inches (low)
Shrink-swell potential: Moderate
Permeability: Moderate
Flooding: None
Depth to seasonal high water table: More than 6.5 feet
Ponding: None

Interpretive Groups

Land capability classification: 7e
Michigan soil management group: 3/5a-a
Habitat type: ATD

Major Uses

Dominant use: Forestland
Other uses: Wildlife habitat, recreation

686B—Annalake-Robago complex, 0 to 6 percent slopes

Setting

Landform: Deltas; lake plains

Average Map Unit Composition

40 percent Annalake and similar soils
40 percent Robago and similar soils
20 percent components of minor extent

Typical Profile

Annalake

A—0 to 9 inches; very fine sandy loam
Bs—9 to 16 inches; fine sandy loam
E and Bt1—16 to 31 inches; stratified loamy very fine sand to silt loam to loamy fine sand
E and Bt2—31 to 48 inches; stratified sand to fine sand to loamy fine sand to silt loam
Bt and E—48 to 61 inches; stratified sand to fine sand to loamy fine sand to silt loam
C—61 to 80 inches; stratified fine sand to loamy fine sand to silt loam to silt

Robago

A—0 to 6 inches; very fine sandy loam
Eg—6 to 9 inches; very fine sandy loam
Bs—9 to 15 inches; sandy loam
B/E—15 to 22 inches; stratified loamy sand to loamy fine sand to sandy loam to very fine sandy loam
Bt—22 to 39 inches; stratified sandy loam to fine sandy loam to very fine sandy loam to clay loam to silty clay loam
C—39 to 80 inches; stratified sandy loam to fine sandy loam to very fine sandy loam

Soil Properties and Qualities

Parent material: Stratified loamy glaciofluvial deposits
Slope: Annalake—1 to 6 percent; Robago—0 to 3 percent
Hazard of soil blowing: Moderate
Surface runoff class: Low
Potential for frost action: High
Depth to restrictive feature: More than 80 inches
Drainage class: Annalake—moderately well drained; Robago—somewhat poorly drained
Available water capacity: 7.7 to 8.7 inches (moderate)
Shrink-swell potential: Moderate
Permeability: Moderate
Flooding: None

Depth to seasonal high water table: Annalake—1.5 to 6.0 feet (April); Robago—1.0 to 6.7 feet (April, May)

Ponding: None

Interpretive Groups

Land capability classification: 2e

Michigan soil management group: Annalake—3a-s; Robago—3b-s

Habitat type: Annalake—ATD; Robago—TMC-D

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

688—Cathro-Leafriver complex, 0 to 1 percent slopes, frequently flooded

Setting

Landform: Drainageways on moraines

Average Map Unit Composition

60 percent Cathro and similar soils

40 percent Leafriver and similar soils

Typical Profile

Cathro

Oa1—0 to 6 inches; muck

Oa2—6 to 31 inches; muck

Cg—31 to 80 inches; fine sandy loam

Leafriver

Oi—0 to 1 inch; slightly decomposed plant material

Oa—1 to 14 inches; muck

Cg—14 to 16 inches; loamy sand

C—16 to 51 inches; sand, gravelly coarse sand

Soil Properties and Qualities

Parent material: Cathro—herbaceous material over loamy drift; Leafriver—sandy glaciofluvial deposits

Slope: 0 to 1 percent

Hazard of soil blowing: Moderate

Surface runoff class: Negligible

Potential for frost action: Cathro—high; Leafriver—moderate

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Available water capacity: Cathro—16.5 inches (very high); Leafriver—1.3 inches (very low)

Shrink-swell potential: Moderate

Permeability: Cathro—moderate; Leafriver—rapid

Highest frequency of flooding: Cathro—frequent (April, May, November); Leafriver—frequent (April, May, October, November)

Depth to seasonal high water table: Cathro—at the surface (January, February, March, April, May, June, October, November, December); Leafriver—at the surface (January, February, March, April, May, October, November, December)

Depth and months of deepest ponding: Cathro—0.2 foot (March, April, May, June, October, November); Leafriver—0.2 foot (March, April, May, October, November)
Months in which ponding does not occur: Cathro—January, February, July, August, September, December; Leafriver—January, February, June, July, August, September, December

Interpretive Groups

Land capability classification: 6w
Michigan soil management group: Cathro—M/3c; Leafriver—5c
Habitat type: Cathro—FI-C; Leafriver—FI

Major Uses

Dominant use: Forestland
Other uses: Wildlife habitat, recreation

689B—Chabeneau-Channing-Gogebic complex, 0 to 6 percent slopes, stony

Setting

Landform: Fluvial terraces

Average Map Unit Composition

35 percent Chabeneau and similar soils
30 percent Channing and similar soils
25 percent Gogebic and similar soils
10 percent components of minor extent

Typical Profile

Chabeneau

Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 2 inches; cobbly fine sandy loam
E—2 to 5 inches; silt loam
Bs1—5 to 10 inches; silt loam
Bs2—10 to 22 inches; silt loam
2BC—22 to 30 inches; gravelly loamy sand
2C1—30 to 48 inches; stratified coarse sand to very gravelly coarse sand
2C2—48 to 121 inches; stratified sand to gravelly sand

Channing

Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 6 inches; very fine sandy loam
E—6 to 7 inches; very fine sandy loam
Bs1—7 to 16 inches; very fine sandy loam
Bs2—16 to 24 inches; fine sandy loam
2C1—24 to 29 inches; gravelly sand
2C2—29 to 62 inches; gravelly sand

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; silt loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam

Soil Survey of Gogebic County, Michigan

2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
2C—68 to 80 inches; gravelly fine sandy loam

Soil Properties and Qualities

Parent material: Chabeneau and Channing—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits; Gogebic—modified loamy eolian deposits over loamy till

Slope: Chabeneau and Channing—0 to 3 percent; Gogebic—1 to 6 percent

Hazard of soil blowing: Chabeneau and Gogebic—slight; Channing—moderate

Surface runoff class: Chabeneau—low; Channing—negligible; Gogebic—medium

Potential for frost action: Chabeneau and Gogebic—moderate; Channing—high

Depth to restrictive feature: Chabeneau and Channing—more than 80 inches; Gogebic—20 inches to a fragipan

Drainage class: Chabeneau and Gogebic—moderately well drained; Channing—somewhat poorly drained

Available water capacity: 5.3 to 5.7 inches (low)

Shrink-swell potential: Chabeneau and Channing—low; Gogebic—moderate

Permeability: Chabeneau and Channing—moderate; Gogebic—very slow

Flooding: None

Depth to seasonal high water table: Chabeneau—2 to 7 feet (April, May);

Channing—1.2 to 6.0 feet (January, February, March, April, May, November, December); Gogebic—1 to 2 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 6s

Michigan soil management group: Chabeneau—3/5a; Channing—3/5b; Gogebic—3a-af

Habitat type: Chabeneau—ATD; Channing—ATD-CI; Gogebic—AVO

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

691B—Dishno-Tula-Rock outcrop complex, 0 to 6 percent slopes

Setting

Landform: Knolls on moraines

Average Map Unit Composition

35 percent Dishno and similar soils

30 percent Tula and similar soils

20 percent Rock outcrop

15 percent components of minor extent

Typical Profile

Dishno

Oe—0 to 1 inch; moderately decomposed plant material

A—1 to 3 inches; cobbly silt loam

E—3 to 9 inches; cobbly silt loam

Bhs—9 to 10 inches; cobbly loam
Bs1—10 to 18 inches; cobbly fine sandy loam
Bs2—18 to 22 inches; cobbly loamy sand
2BC—22 to 29 inches; very stony loamy sand
2C—29 to 46 inches; very stony loamy sand
3R—46 inches; bedrock

Tula

Oa—0 to 1 inch; highly decomposed plant material
A—1 to 5 inches; cobbly very fine sandy loam
E—5 to 8 inches; cobbly very fine sandy loam
Bs1—8 to 20 inches; cobbly very fine sandy loam
Bs2—20 to 28 inches; gravelly sandy loam
2E/Bx—28 to 37 inches; gravelly sandy loam
2B/Ex—37 to 62 inches; gravelly loam
2C—62 to 80 inches; gravelly sandy loam

Soil Properties and Qualities

Parent material: Loamy eolian deposits over coarse-loamy till

Slope: Dishno—1 to 6 percent; Tula—0 to 4 percent

Hazard of soil blowing: Moderate

Surface runoff class: Low

Potential for frost action: Dishno—moderate; Tula—high

Depth to restrictive feature: Dishno—40 to 60 inches to lithic bedrock; Tula—28 inches to a fragipan

Drainage class: Dishno—moderately well drained; Tula—somewhat poorly drained

Available water capacity: Dishno—5.4 inches (low); Tula—7.2 inches (moderate)

Shrink-swell potential: Dishno—low; Tula—moderate

Permeability: Dishno—moderate; Tula—very slow

Flooding: None

Depth to seasonal high water table: Dishno—1.0 to 3.8 feet (April, October); Tula—0.5 foot to 2.5 feet (April, May)

Ponding: None

Interpretive Groups

Land capability classification: 3s

Michigan soil management group: Dishno—3a; Tula—3b-af; Rock outcrop—none assigned

Habitat type: Dishno—ATD; Tula—TMC-D; Rock outcrop—none assigned

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

691D—Dishno-Tula-Rock outcrop complex, 0 to 35 percent slopes

Setting

Landform: Knolls on moraines

Average Map Unit Composition

35 percent Dishno and similar soils

30 percent Tula and similar soils

Soil Survey of Gogebic County, Michigan

20 percent Rock outcrop
15 percent components of minor extent

Typical Profile

Dishno

Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 3 inches; cobbly silt loam
E—3 to 9 inches; cobbly silt loam
Bhs—9 to 10 inches; cobbly loam
Bs1—10 to 18 inches; cobbly fine sandy loam
Bs2—18 to 22 inches; cobbly loamy sand
2BC—22 to 29 inches; very stony loamy sand
2C—29 to 46 inches; very stony loamy sand
3R—46 inches; bedrock

Tula

Oa—0 to 1 inch; highly decomposed plant material
A—1 to 5 inches; cobbly very fine sandy loam
E—5 to 8 inches; cobbly very fine sandy loam
Bs1—8 to 20 inches; cobbly very fine sandy loam
Bs2—20 to 28 inches; gravelly sandy loam
2E/Bx—28 to 37 inches; gravelly sandy loam
2B/Ex—37 to 62 inches; gravelly loam
2C—62 to 80 inches; gravelly sandy loam

Soil Properties and Qualities

Parent material: Loamy eolian deposits over coarse-loamy till

Slope: Dishno—0 to 35 percent; Tula—0 to 4 percent

Hazard of soil blowing: Moderate

Surface runoff class: Low

Potential for frost action: Dishno—moderate; Tula—high

Depth to restrictive feature: Dishno—40 to 60 inches to lithic bedrock; Tula—28 inches to a fragipan

Drainage class: Dishno—moderately well drained; Tula—somewhat poorly drained

Available water capacity: Dishno—5.4 inches (low); Tula—7.2 inches (moderate)

Shrink-swell potential: Dishno—low; Tula—moderate

Permeability: Dishno—moderate; Tula—very slow

Flooding: None

Depth to seasonal high water table: Dishno—1.0 to 3.8 feet (April, October);
Tula—0.5 foot to 2.5 feet (April, May)

Ponding: None

Interpretive Groups

Land capability classification: 7s

Michigan soil management group: Dishno—3a; Tula—3b-af; Rock outcrop—none assigned

Habitat type: Dishno—ATD; Tula—TMC-D; Rock outcrop—none assigned

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

693B—Chabeneau-Annalake complex, 0 to 6 percent slopes

Setting

Landform: Lake terraces; till plains

Average Map Unit Composition

50 percent Chabeneau and similar soils
40 percent Annalake and similar soils
10 percent components of minor extent

Typical Profile

Chabeneau

Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 2 inches; silt loam
E—2 to 5 inches; silt loam
Bs1—5 to 10 inches; silt loam
Bs2—10 to 22 inches; silt loam
2BC—22 to 30 inches; gravelly loamy sand
2C1—30 to 48 inches; stratified coarse sand to very gravelly coarse sand
2C2—48 to 121 inches; stratified sand to gravelly sand

Annalake

A—0 to 9 inches; very fine sandy loam
Bs—9 to 16 inches; fine sandy loam
E and Bt1—16 to 31 inches; stratified loamy very fine sand to silt loam to loamy fine sand
E and Bt2—31 to 48 inches; stratified sand to fine sand to loamy fine sand to silt loam
Bt and E—48 to 61 inches; stratified sand to fine sand to loamy fine sand to silt loam
C—61 to 80 inches; stratified fine sand to loamy fine sand to silt loam to silt

Soil Properties and Qualities

Parent material: Chabeneau—coarse-loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits; Annalake—stratified loamy glaciofluvial deposits

Slope: Chabeneau—0 to 3 percent; Annalake—1 to 6 percent

Hazard of soil blowing: Chabeneau—slight; Annalake—moderate

Surface runoff class: Low

Potential for frost action: Chabeneau—moderate; Annalake—high

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Available water capacity: Chabeneau—5.7 inches (low); Annalake—8.7 inches (moderate)

Shrink-swell potential: Chabeneau—low; Annalake—moderate

Permeability: Moderate

Flooding: None

Depth to seasonal high water table: Chabeneau—2 to 7 feet (April, May);
Annalake—1.5 to 6.0 feet (April)

Ponding: None

Interpretive Groups

Land capability classification: 2e

Michigan soil management group: Chabeneau—3/5a; Annalake—3a-s

Habitat type: Chabeneau—AVO; Annalake—ATD

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

694D—Annalake-Stutts-Arnheim, frequently flooded, complex, drainageway, 0 to 35 percent slopes

Setting

Landform: River valleys on lake terraces

Average Map Unit Composition

40 percent Annalake and similar soils

35 percent Stutts and similar soils

25 percent Arnheim and similar soils

Typical Profile

Annalake

A—0 to 9 inches; very fine sandy loam

Bs—9 to 16 inches; fine sandy loam

E and Bt1—16 to 31 inches; stratified loamy very fine sand to silt loam to loamy fine sand

E and Bt2—31 to 48 inches; stratified sand to fine sand to loamy fine sand to silt loam

Bt and E—48 to 61 inches; stratified sand to fine sand to loamy fine sand to silt loam

C—61 to 80 inches; stratified fine sand to loamy fine sand to silt loam to silt

Stutts

Oe—0 to 1 inch; moderately decomposed plant material

E—1 to 6 inches; loamy fine sand

Bhs—6 to 8 inches; loamy fine sand

Bs1—8 to 15 inches; loamy fine sand

Bs2—15 to 18 inches; fine sand

BC—18 to 28 inches; fine sand

C—28 to 80 inches; fine sand

Arnheim

A—0 to 5 inches; mucky silt loam

Cg—5 to 10 inches; silt loam

C—10 to 80 inches; stratified very fine sandy loam to silt loam to loamy fine sand to fine sandy loam

Soil Properties and Qualities

Parent material: Annalake—stratified loamy glaciofluvial deposits; Stutts—sandy glaciofluvial deposits; Arnheim—coarse-loamy alluvium

Slope: Annalake and Stutts—0 to 35 percent; Arnheim—0 to 1 percent

Hazard of soil blowing: Annalake and Stutts—moderate; Arnheim—slight

Surface runoff class: Annalake—high; Stutts—medium; Arnheim—negligible

Potential for frost action: Annalake and Arnheim—high; Stutts—low

Depth to restrictive feature: More than 80 inches

Drainage class: Annalake—moderately well drained; Stutts—somewhat excessively drained; Arnheim—poorly drained

Available water capacity: Annalake—8.7 inches (moderate); Stutts—4.5 inches (low); Arnheim—11.3 inches (high)

Shrink-swell potential: Annalake and Arnheim—moderate; Stutts—low

Permeability: Annalake and Arnheim—moderate; Stutts—moderately rapid

Soil Survey of Gogebic County, Michigan

Highest frequency of flooding: Annalake and Stutts—none; Arnheim—frequent (March, April, May, June)

Depth to seasonal high water table: Annalake—1.5 to 6.0 feet (April); Stutts—more than 6.5 feet; Arnheim—at the surface (January, February, March, April, May, October, November, December)

Depth and months of deepest ponding: Annalake and Stutts—none; Arnheim—0.2 foot (June, July, August, September, October, November)

Months in which ponding does not occur: Arnheim—January, February, March, April, May, December

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: Annalake—3a-s; Stutts—4a; Arnheim—L-2c

Habitat type: Annalake—ATD; Stutts—TM; Arnheim—FMC

Major Uses

Dominant use: Forestland

Other uses: Wildlife habitat, recreation

5170—Minocqua-Pleine-Cathro complex, 0 to 2 percent slopes

Setting

Landform: Depressions and drainageways on outwash plains

Average Map Unit Composition

50 percent Minocqua and similar soils

30 percent Pleine and similar soils

15 percent Cathro and similar soils

5 percent components of minor extent

Typical Profile

Minocqua

Oe—0 to 4 inches; muck

Eg—4 to 15 inches; silt loam

2Bg—15 to 28 inches; loam

3C—28 to 60 inches; stratified sand to very gravelly coarse sand

Pleine

Oa—0 to 9 inches; very cobbly muck

Bg—9 to 20 inches; very fine sandy loam

Bw—20 to 33 inches; fine sandy loam

C—33 to 80 inches; gravelly sandy loam

Cathro

Oa—0 to 28 inches; muck

Cg1—28 to 49 inches; loam

Cg2—49 to 60 inches; sandy loam

Soil Properties and Qualities

Parent material: Minocqua—silty and loamy alluvium underlain by sandy and gravelly outwash; Pleine—loamy till; Cathro—herbaceous material 16 to 51 inches thick underlain by loamy deposits

Soil Survey of Gogebic County, Michigan

Slope: Minocqua and Pleine—0 to 2 percent; Cathro—0 to 1 percent

Hazard of soil blowing: Slight

Surface runoff class: Negligible

Potential for frost action: High

Depth to restrictive feature: More than 80 inches

Drainage class: Minocqua and Pleine—poorly drained; Cathro—very poorly drained

Available water capacity: Minocqua—6.2 inches (moderate); Pleine—11.7 inches (high); Cathro—16.6 inches (very high)

Shrink-swell potential: Low

Permeability: Moderate

Flooding: None

Depth to seasonal high water table: Minocqua and Pleine—at the surface (April, May, November); Cathro—at the surface all year

Depth and months of deepest ponding: Minocqua—0.5 foot (April, May); Pleine—0.2 foot (March, April, May, June, October, November); Cathro—0.5 foot (March, April, May, June, November)

Months in which ponding does not occur: Minocqua—January, February, March, June, July, August, September, October, November, December; Pleine—January, February, July, August, September, December; Cathro—January, February, July, August, September, October, December

Interpretive Groups

Land capability classification: 6w

Michigan soil management group: Minocqua—4c; Pleine—3c; Cathro—M/3c

Habitat type: Minocqua—TMC; Pleine and Cathro—TTM

Major Uses

Dominant uses: Forestland, wetland wildlife habitat

5171B—Tula-Wormet-Gogebic, sandy substratum, complex, 0 to 6 percent slopes

Setting

Landform: Ground moraines; end moraines

Average Map Unit Composition

60 percent Tula and similar soils

15 percent Wormet and similar soils

15 percent Gogebic and similar soils

10 percent components of minor extent

Typical Profile

Tula

Oa—0 to 1 inch; highly decomposed plant material

A—1 to 5 inches; fine sandy loam

E—5 to 8 inches; fine sandy loam

Bs1—8 to 20 inches; cobbly very fine sandy loam

2Bs2—20 to 28 inches; gravelly sandy loam

2(E/B)x—28 to 37 inches; gravelly sandy loam

2(B/E)x—37 to 62 inches; gravelly loam

2C—62 to 80 inches; gravelly sandy loam

Soil Survey of Gogebic County, Michigan

Wormet

Oe—0 to 1 inch; moderately decomposed plant material
A—1 to 2 inches; sandy loam
E—2 to 6 inches; sandy loam
Bhs—6 to 8 inches; sandy loam
Bs—8 to 19 inches; sandy loam
2C—19 to 60 inches; stratified sand to very gravelly coarse sand

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; fine sandy loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
3C—68 to 80 inches; gravelly sand

Soil Properties and Qualities

Parent material: Tula—modified loamy eolian material and the underlying loamy till;
Wormet—loamy alluvium or eolian deposits and the underlying stratified sandy
and gravelly outwash; Gogebic—modified loamy eolian deposits over loamy till
over sandy till
Slope: Tula—0 to 4 percent; Wormet—0 to 3 percent; Gogebic—2 to 6 percent
Hazard of soil blowing: Tula and Wormet—moderate; Gogebic—slight
Surface runoff class: Tula—high; Wormet and Gogebic—low
Potential for frost action: Tula—high; Wormet and Gogebic—moderate
Depth to restrictive feature: Tula—28 inches to a fragipan; Wormet—more than 80
inches; Gogebic—20 inches to a fragipan
Drainage class: Tula and Wormet—somewhat poorly drained; Gogebic—moderately
well drained
Available water capacity: 4.7 to 5.5 inches (low)
Shrink-swell potential: Tula and Wormet—low; Gogebic—moderate
Permeability: Tula and Gogebic—very slow; Wormet—moderately rapid
Flooding: None
Depth to seasonal high water table: Tula—at the surface (April); Gogebic—1 to 2 feet
(April); Wormet—0.5 foot to 6.7 feet (April)
Ponding: None

Interpretive Groups

Land capability classification: 7s
Michigan soil management group: Tula—3b-af; Wormet—3/5b; Gogebic—3a-af
Habitat type: Tula and Wormet—TMC-D; Gogebic—ATD

Major Uses

Dominant uses: Forestland, wetland wildlife habitat

5172B—Gogebic, sandy substratum-Pence-Cathro complex, 0 to 6 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

60 percent Gogebic and similar soils
15 percent Pence and similar soils
15 percent Cathro and similar soils
10 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; fine sandy loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
3C—68 to 80 inches; gravelly sand

Pence

Oe—0 to 2 inches; moderately decomposed plant material
E—2 to 6 inches; fine sandy loam
Bs1—6 to 9 inches; fine sandy loam
Bs2—9 to 13 inches; fine sandy loam
2Bs3—13 to 16 inches; coarse sand
2BC—16 to 31 inches; coarse sand
2C—31 to 80 inches; gravelly coarse sand, sand

Cathro

Oa—0 to 28 inches; muck
Cg1—28 to 49 inches; loam
Cg2—49 to 60 inches; sandy loam

Soil Properties and Qualities

Parent material: Gogebic—modified loamy eolian deposits over loamy till over sandy till; Pence—loamy alluvium underlain by sandy and gravelly glacial outwash;

Cathro—herbaceous material 16 to 51 inches thick underlain by loamy deposits

Slope: Gogebic—2 to 6 percent; Pence—0 to 6 percent; Cathro—0 to 1 percent

Hazard of soil blowing: Gogebic and Cathro—slight; Pence—moderate

Surface runoff class: Gogebic—low; Pence—very low; Cathro—negligible

Potential for frost action: Gogebic—moderate; Pence—low; Cathro—high

Depth to restrictive feature: Gogebic—20 inches to a fragipan; Pence and Cathro—more than 80 inches

Drainage class: Gogebic—moderately well drained; Pence—somewhat excessively drained; Cathro—very poorly drained

Soil Survey of Gogebic County, Michigan

Available water capacity: Gogebic and Pence—4.1 to 5.5 inches (low); Cathro—16.6 inches (very high)

Shrink-swell potential: Gogebic and Pence—moderate; Cathro—low

Permeability: Gogebic—very slow; Pence—moderately rapid; Cathro—moderate

Flooding: None

Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Pence—more than 6.5 feet; Cathro—at the surface all year

Depth and months of deepest ponding: Gogebic and Pence—none; Cathro—0.5 foot (March, April, May, June, November)

Months in which ponding does not occur: Cathro—January, February, July, August, September, October, December

Interpretive Groups

Land capability classification: 4s

Michigan soil management group: Gogebic—3a-af; Pence—4a; Cathro—M/3c

Habitat type: Gogebic—ATD; Pence—TMV; Cathro—TTM

Major Uses

Dominant uses: Pasture, forestland, wildlife habitat

5172C—Gogebic, sandy substratum-Pence-Cathro complex, 0 to 18 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

60 percent Gogebic and similar soils

15 percent Pence and similar soils

15 percent Cathro and similar soils

10 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; fine sandy loam

E—5 to 8 inches; silt loam

Bhs—8 to 12 inches; silt loam

Bs—12 to 20 inches; fine sandy loam

2E/Bx—20 to 33 inches; gravelly fine sandy loam

2B/Ex—33 to 49 inches; fine sandy loam

2Bt—49 to 54 inches; fine sandy loam

2BC—54 to 68 inches; fine sandy loam

3C—68 to 80 inches; gravelly sand

Pence

Oe—0 to 2 inches; moderately decomposed plant material

E—2 to 6 inches; fine sandy loam

Bs1—6 to 9 inches; fine sandy loam

Bs2—9 to 13 inches; fine sandy loam

2Bs3—13 to 16 inches; coarse sand

2BC—16 to 31 inches; coarse sand

2C—31 to 80 inches; gravelly coarse sand, sand

Cathro

Oa—0 to 28 inches; muck

Cg1—28 to 49 inches; loam

Cg2—49 to 60 inches; sandy loam

Soil Properties and Qualities

Parent material: Gogebic—modified loamy eolian deposits over loamy till over sandy till; Pence—loamy alluvium underlain by sandy and gravelly glacial outwash;

Cathro—herbaceous material 16 to 51 inches thick underlain by loamy deposits

Slope: Gogebic and Pence—6 to 18 percent; Cathro—0 to 1 percent

Hazard of soil blowing: Gogebic and Cathro—slight; Pence—moderate

Surface runoff class: Gogebic—medium; Pence—low; Cathro—negligible

Potential for frost action: Gogebic—moderate; Pence—low; Cathro—high

Depth to restrictive feature: Gogebic—20 inches to a fragipan; Pence and Cathro—more than 80 inches

Drainage class: Gogebic—moderately well drained; Pence—somewhat excessively drained; Cathro—very poorly drained

Available water capacity: Gogebic and Pence—4.1 to 5.5 inches (low); Cathro—16.6 inches (very high)

Shrink-swell potential: Gogebic and Pence—moderate; Cathro—low

Permeability: Gogebic—very slow; Pence—moderately rapid; Cathro—moderate

Flooding: None

Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Pence—more than 6.5 feet; Cathro—at the surface all year

Depth and months of deepest ponding: Gogebic and Pence—none; Cathro—0.5 foot (March, April, May, June, November)

Months in which ponding does not occur: Cathro—January, February, July, August, September, October, December

Interpretive Groups

Land capability classification: 6s

Michigan soil management group: Gogebic—3a-af; Pence—4a; Cathro—M/3c

Habitat type: Gogebic—ATD; Pence—TMV; Cathro—TTM

Major Uses

Dominant uses: Pasture, forestland, wildlife habitat

5172D—Gogebic, sandy substratum-Pence-Cathro complex, 0 to 35 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

60 percent Gogebic and similar soils

15 percent Pence and similar soils

15 percent Cathro and similar soils

10 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 5 inches; fine sandy loam

Soil Survey of Gogebic County, Michigan

E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
3C—68 to 80 inches; gravelly sand

Pence

Oe—0 to 2 inches; moderately decomposed plant material
E—2 to 6 inches; fine sandy loam
Bs1—6 to 9 inches; fine sandy loam
Bs2—9 to 13 inches; fine sandy loam
2Bs3—13 to 16 inches; coarse sand
2BC—16 to 31 inches; coarse sand
2C—31 to 80 inches; gravelly coarse sand, sand

Cathro

Oa—0 to 28 inches; muck
Cg1—28 to 49 inches; loam
Cg2—49 to 60 inches; sandy loam

Soil Properties and Qualities

Parent material: Gogebic—modified loamy eolian deposits over loamy till over sandy till; Pence—loamy alluvium underlain by sandy and gravelly glacial outwash;

Cathro—herbaceous material 16 to 51 inches thick underlain by loamy deposits

Slope: Gogebic and Pence—18 to 35 percent; Cathro—0 to 1 percent

Hazard of soil blowing: Gogebic and Cathro—slight; Pence—moderate

Surface runoff class: Gogebic—high; Pence—medium; Cathro—negligible

Potential for frost action: Gogebic—moderate; Pence—low; Cathro—high

Depth to restrictive feature: Gogebic—20 inches to a fragipan; Pence and Cathro—more than 80 inches

Drainage class: Gogebic—moderately well drained; Pence—somewhat excessively drained; Cathro—very poorly drained

Available water capacity: Gogebic and Pence—4.1 to 5.5 inches (low); Cathro—16.6 inches (very high)

Shrink-swell potential: Gogebic and Pence—moderate; Cathro—low

Permeability: Gogebic—very slow; Pence—moderately rapid; Cathro—moderate

Flooding: None

Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Pence—more than 6.5 feet; Cathro—at the surface all year

Depth and months of deepest ponding: Gogebic and Pence—none; Cathro—0.5 foot (March, April, May, June, November)

Months in which ponding does not occur: Cathro—January, February, July, August, September, October, December

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: Gogebic—3a-af; Pence—4a; Cathro—M/3c

Habitat type: Gogebic—ATD; Pence—TMV; Cathro—TTM

Major Uses

Dominant uses: Pasture, forestland, wildlife habitat

5173D—Gogebic, sandy substratum-Pence complex, 18 to 35 percent slopes

Setting

Landform: Till plains

Average Map Unit Composition

60 percent Gogebic and similar soils
30 percent Pence and similar soils
10 percent components of minor extent

Typical Profile

Gogebic

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 5 inches; fine sandy loam
E—5 to 8 inches; silt loam
Bhs—8 to 12 inches; silt loam
Bs—12 to 20 inches; fine sandy loam
2E/Bx—20 to 33 inches; gravelly fine sandy loam
2B/Ex—33 to 49 inches; fine sandy loam
2Bt—49 to 54 inches; fine sandy loam
2BC—54 to 68 inches; fine sandy loam
3C—68 to 80 inches; gravelly sand

Pence

Oe—0 to 2 inches; moderately decomposed plant material
E—2 to 6 inches; fine sandy loam
Bs1—6 to 9 inches; fine sandy loam
Bs2—9 to 13 inches; fine sandy loam
2Bs3—13 to 16 inches; coarse sand
2BC—16 to 31 inches; coarse sand
2C—31 to 80 inches; gravelly coarse sand, sand

Soil Properties and Qualities

Parent material: Gogebic—modified loamy eolian deposits over loamy till over sandy till; Pence—loamy alluvium underlain by sandy and gravelly glacial outwash

Slope: 18 to 35 percent

Hazard of soil blowing: Gogebic—slight; Pence—moderate

Surface runoff class: Gogebic—high; Pence—medium

Potential for frost action: Gogebic—moderate; Pence—low

Depth to restrictive feature: Gogebic—20 inches to a fragipan; Pence—more than 80 inches

Drainage class: Gogebic—moderately well drained; Pence—somewhat excessively drained

Available water capacity: 4.1 to 5.5 inches (low)

Shrink-swell potential: Moderate

Permeability: Gogebic—very slow; Pence—moderately rapid

Flooding: None

Depth to seasonal high water table: Gogebic—1 to 2 feet (April); Pence—more than 6.5 feet

Ponding: None

Interpretive Groups

Land capability classification: 7e

Michigan soil management group: Gogebic—3a-af; Pence—4a

Habitat type: Gogebic—ATD; Pence—TMV

Major Uses

Dominant uses: Pasture, forestland, wildlife habitat

MW—Miscellaneous water

- This map unit consists of bodies of water at municipal sewage treatment plants and animal waste treatment facilities.

W—Water

- This map unit consists of naturally occurring bodies of water, such as rivers, streams, lakes, reservoirs, and ponds.

Use and Management of the Soils

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as forestland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreational facilities; and as wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of gravel, sand, reclamation material, roadfill, and topsoil. They can use it to identify areas where bedrock, wetness, or very firm soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, campgrounds, playgrounds, lawns, and trees and shrubs.

Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. The ratings in these tables are both verbal and numerical.

Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are *not limited*, *somewhat limited*, and *very limited*. The suitability ratings are expressed as *well suited*, *moderately suited*, *poorly suited*, and *unsuited* or as *good*, *fair*, and *poor*.

Numerical Ratings

Numerical ratings in the tables indicate the relative severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use and the point at which the soil feature is not a limitation. The limitations appear in order from the most limiting to the least limiting. Thus, if more than one limitation is identified, the most severe limitation is listed first and the least severe one is listed last.

Crops and Pasture

Some general information regarding use of the soils for crops and pasture is provided in this section. The estimated yields of the main crops and pasture plants are listed, the system of land capability classification used by the Natural Resources Conservation Service is explained, and important farmland is described.

Planners of management systems for individual fields or farms should consider the detailed information given in the description of each soil under the heading "Detailed Soil Map Units." Specific information on management practices and solutions to the soil concerns can be obtained from the local office of the Natural Resources Conservation Service, the Soil Conservation District, Michigan State University Extension, or a certified planning professional.

If drainage is planned, care must be taken so that designated wetlands are not affected. Drainage of these areas could violate existing laws and regulations and may jeopardize receipt of USDA benefits. Information about the design of drainage systems and wetland compliance is available in local offices of the Natural Resources Conservation Service.

Yields per Acre

The average yields per acre that can be expected of the principal crops and pasture plants under a high level of management are shown in table 5. In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors. The land capability classification of map units in the survey area also is shown in the table.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations also are considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in table 5 are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local

office of the Natural Resources Conservation Service or the Extension Service can provide information about the management and productivity of the soils for those crops.

Land Capability Classification

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for forestland or for engineering purposes.

In the capability system, soils are generally grouped at three levels—capability class, subclass, and unit (USDA, 1961).

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have slight limitations that restrict their use.

Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e*, *w*, *s*, or *c*, to the class numeral, for example, 2*e*. The letter *e* shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c*, used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w*, *s*, or *c* because the soils in class 5 are subject to little or no erosion.

Capability units are soil groups within a subclass. The soils in a capability unit are enough alike to be suited to the same crops and pasture plants, to require similar management, and to have similar productivity. Capability units are generally designated by adding an Arabic numeral to the subclass symbol, for example, 2*e*-4 and 3*e*-6. These units are not given in all soil surveys.

The capability classification of the soils in this survey area is given in the section "Detailed Soil Map Units," in the yields table, and under the heading "Interpretive Groups."

At the end of each map unit description and in the "Interpretive Groups" section, the Michigan soil management group is listed. The soils in each map unit are assigned to a group according to the dominant texture, the drainage class, and the major management concerns (Mokma and others, 1978). More detailed information about these groups is available from the local office of the Michigan State University Extension.

Prime Farmland and Other Important Farmland

Table 6 lists the map units in the survey area that are considered prime farmland. This list does not constitute a recommendation for a particular land use. The "Interpretive Groups" table also shows which soils are considered prime farmland or other important farmland.

In an effort to identify the extent and location of important farmlands, the Natural Resources Conservation Service, in cooperation with other interested Federal, State, and local government organizations, has inventoried land that can be used for the production of the Nation's food supply.

Prime farmland is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

Approximately 12,900 acres in Gogebic County, or about 1.8 percent of the survey area, meets the requirements for prime farmland.

A recent trend in land use in some parts of the survey area has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops, such as citrus, tree nuts, olives, cranberries, and other fruits and vegetables. It has the special combination of soil quality, growing season, moisture supply, temperature, humidity, air drainage, elevation, and aspect needed for the soil to economically produce sustainable high yields of these crops when properly managed. The water supply is dependable and of adequate quality. Nearness to markets is an additional consideration. Unique

farmland is not based on national criteria. It commonly is in areas where there is a special microclimate, such as the wine country in California.

In some areas, land that does not meet the criteria for prime or unique farmland is considered to be *farmland of statewide importance* for the production of food, feed, fiber, forage, and oilseed crops. The criteria for defining and delineating farmland of statewide importance are determined by the appropriate State agencies. Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some areas may produce as high a yield as prime farmland if conditions are favorable. Farmland of statewide importance may include tracts of land that have been designated for agriculture by State law.

In some areas that are not identified as having national or statewide importance, land is considered to be *farmland of local importance* for the production of food, feed, fiber, forage, and oilseed crops. This farmland is identified by the appropriate local agencies. Farmland of local importance may include tracts of land that have been designated for agriculture by local ordinance.

Forestland

The tables described in this section provide information about the use of the soils in the survey area as forestland.

Forestland Management and Productivity

Table 7 can help woodland owners or forest managers plan the use of soils for wood crops.

Erosion hazard ratings are based on the soil erosion factor K, slope, and content of rock fragments. The ratings apply to unsurfaced roads and trails. The hazard is described as slight, moderate, or severe. A rating of *slight* indicates that little or no erosion is likely; *moderate* indicates that some erosion is likely, that the roads or trails may require occasional maintenance, and that simple erosion-control measures are needed; and *severe* indicates that significant erosion is expected, that the roads or trails require frequent maintenance, and that costly erosion-control measures are needed.

Site preparation ratings are based on slope, depth to a restrictive layer, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as *well suited*, *poorly suited*, or *unsuited* to this management activity. The part of the soil from the surface to a depth of about 1 foot is considered in the ratings.

Windthrow hazard is the likelihood that trees will be uprooted by the wind because the soil is not deep enough for adequate root anchorage. The main restrictions that affect rooting are a seasonal high water table and the depth to bedrock, a fragipan, or other limiting layers. A rating of *slight* indicates that under normal conditions no trees are blown down by the wind. Strong winds may damage trees, but they do not uproot them. A rating of *moderate* indicates that some trees can be blown down during periods when the soil is wet and winds are moderate or strong. A rating of *severe* indicates that many trees can be blown down during these periods.

Seedling mortality ratings are based on flooding, ponding, depth to a water table, content of lime, reaction, salinity, available water capacity, soil moisture regime, soil temperature regime, aspect, and slope. The soils are described as having a *low*, *moderate*, or *high* potential for seedling mortality.

The *potential productivity* of merchantable or *common trees* on a soil is expressed as a *site index* and as a *volume* number. The site index is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of

years. The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that woodland managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability.

The *volume of wood fiber*, a number, is the yield likely to be produced by the most important trees. This number, expressed as cubic feet per acre per year, indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

Suggested trees to plant are those that are suitable for commercial wood production.

Forestland Harvesting

Table 8 provides expanded information concerning the operability of harvesting equipment. The table gives information about operating harvesting or thinning equipment in logging areas and on skid roads, log landings, and haul roads. Limitations are given for the most limiting season and for the preferred operating season. The most limiting season in this survey area generally is spring or late fall. In some areas, however, it is during dry periods in summer, when loose sand can limit trafficability on deep, excessively drained, sandy soils.

The preferred operating season is the period when harvesting or thinning causes the least amount of soil damage. This period generally is when the soil is not too wet or when the ground is frozen or partly frozen or has an adequate snow cover.

For limitations affecting construction of *haul roads*, the ratings are based on slope, flooding, plasticity index, the hazard of soil slippage, content of sand, the Unified classification, rock fragments on or below the surface, depth to a restrictive layer that is indurated, depth to a water table, and ponding. The soils are described as well suited, moderately suited, and poorly suited. A rating of *well suited* indicates that no significant limitations affect construction activities, *moderately suited* indicates that one or more limitations can cause some difficulty in construction, and *poorly suited* indicates that one or more limitations can make construction very difficult or very costly.

The ratings of suitability for *log landings* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, ponding, flooding, and the hazard of soil slippage. The soils are described as well suited, moderately suited, or poorly suited to use as log landings.

Ratings in the column *logging areas and skid roads* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, and ponding. The soils are described as well suited, moderately suited, or poorly suited to this use.

Forest Habitat Types

The information in this section is derived from the field guide to the habitat classification system for the Upper Peninsula of Michigan and northeast Wisconsin (Coffman and others, 1980). The system of habitat classification used in the guide is based on the concept that plants occur in predictable patterns or communities and that these communities reflect differences in site characteristics.

Besides identifying the various habitat types by means of vegetative keys, the guide also provides information about the different possible successional stages for most of the habitat types. The successional stages depend largely on how the forest has been disturbed. They include the succession after logging in the original climax stands, the succession after logging in second-growth stands, and the succession in stands that have been both logged and burned.

The guide gives the suggested forest management for each of the successional stages. This management includes methods of thinning and harvest, site preparation, and measures that improve regeneration of the stands. The potential productivity in terms of a site index and mean annual volume in cubic feet per acre per year is given for most of the habitat types. The development of the descriptive or interpretive information for some of the habitat types, however, is based on limited data and thus should be used with caution.

Habitat types have been determined for each map unit in the survey area, with the exception of miscellaneous areas. The primary habitat type is the one that is most common on the map unit. The secondary habitat type is less common. Habitat types are listed in the section "Detailed Soil Map Units" and under the heading "Interpretive Groups." The following paragraphs describe the habitat types. They provide information about the potential climax species, some of the common understory species, and, if known, the potential productivity of the habitat type.

AOC—Acer-Osmorhiza-Caulophyllum habitat type. This habitat type has a potential climax overstory dominated by sugar maple. Other species include eastern hemlock and American basswood. American elm, white ash, and eastern hophornbeam are in some areas. The dominant ground flora includes spinulose shield fern, blue cohosh, sweet cicely, ladyfern, smooth yellow violet, Canada white violet, and downy yellow violet. The potential productivity for northern hardwoods is high.

ATD—Acer-Tsuga-Dryopteris habitat type. This habitat type has a potential climax overstory dominated by sugar maple. Other species include eastern hemlock and American basswood. Yellow birch, red maple, American beech, and American elm are in some areas. The dominant ground flora includes spinulose shield fern, rosy twisted stalk, hairy Solomon's seal, red elderberry, and wild lily-of-the-valley. The potential productivity is moderately high for northern hardwoods and high for aspen. The potential productivity for red pine plantations is high if plant competition is controlled.

ATD-CI—Acer-Tsuga-Dryopteris habitat type, Circaea-Impatiens phase. This habitat type is commonly located within upland drainage systems. It has a potential climax overstory dominated by sugar maple. Other species include eastern hemlock and American basswood. Yellow birch, red maple, American beech, and American elm are in some areas. The dominant ground flora includes spinulose shield fern, rosy twisted stalk, hairy Solomon's seal, red elderberry, wild lily-of-the-valley, jewelweed, and dwarf enchanter's nightshade. The potential productivity is moderately high for northern hardwoods and high for aspen. The potential productivity for red pine plantations is high if plant competition is controlled.

ATD-D—Acer-Tsuga-Dryopteris habitat type, Dryopteris phase. This habitat type has a potential climax overstory dominated by sugar maple. Other species include eastern hemlock and American basswood. Yellow birch, red maple, American beech, and American elm are in some areas. The dominant ground flora includes spinulose shield fern, rosy twisted stalk, hairy Solomon's seal, red elderberry, and wild lily-of-the-valley. The potential productivity is moderately high for northern hardwoods and high for aspen. The potential productivity for red pine plantations is high if plant competition is controlled.

AVO—Acer-Viola-Osmorhiza habitat type. This habitat type has a potential climax overstory dominated by sugar maple. Other species include American basswood, white ash, yellow birch, eastern hophornbeam, eastern hemlock, and American elm. The dominant ground flora includes Canada white violet, downy yellow violet, smooth yellow violet, sweet cicely, spinulose shield fern, ladyfern, hairy Solomon's seal, and rosy twisted stalk. The potential productivity is high for northern hardwoods and aspen. It also is high for red pine plantations if plant competition is controlled.

AVO-CI—Acer-Viola-Osmorhiza habitat type, Circaea-Impatiens phase. This habitat type commonly occurs within upland drainage systems. It has a potential climax overstory dominated by sugar maple. Other species include American basswood, white ash, yellow birch, hophornbeam, eastern hemlock, and American elm. The dominant ground flora includes Canada white violet, downy yellow violet, smooth yellow violet, sweet cicely, spinulose shield fern, ladyfern, hairy Solomon's seal, rosy twisted stalk, jewelweed, and dwarf enchanter's nightshade. The potential productivity is high for northern hardwoods and aspen. It also is high for red pine plantations if plant competition is controlled.

FE—Fraxinus-Eupatorium habitat type. This habitat type has a potential climax overstory dominated by black ash and American elm. Other species include red maple, balsam fir, and white ash. The dominant ground flora includes sedges, speckled alder, northern dewberry, boneset, spotted joeypyeweed, and water hemlock.

FI—Fraxinus-Impatiens habitat type. This habitat type has a potential climax overstory dominated by white ash and red maple. Other species include sugar maple, black ash, and balsam fir. The dominant ground flora includes jewelweed, sedges, dwarf enchanter's nightshade, spinulose shield fern, ladyfern, red elderberry, and field mint. The potential productivity for northern hardwoods is moderate.

FI-C—Fraxinus-Impatiens habitat type, Caltha phase. This habitat type occurs within the Fraxinus-Impatiens habitat type in areas where there is flowing water and where marsh marigold is common. It has a potential climax overstory dominated by white ash and red maple. Other species include sugar maple, black ash, and balsam fir. The dominant ground flora includes jewelweed, sedges, dwarf enchanter's nightshade, spinulose shield fern, ladyfern, red elderberry, marsh marigold, and field mint. The potential productivity for northern hardwoods is moderate.

FMC—Fraxinus-Mentha-Carex habitat type. This habitat type has a potential climax overstory dominated by black ash and American elm. Other species include red maple and balsam fir. The dominant ground flora includes sedges, field mint, speckled alder, and jewelweed.

FMC-C—Fraxinus-Mentha-Carex habitat type, Carex phase. This habitat type has a potential climax overstory dominated by black ash and American elm. Other species include balsam fir and red maple. The dominant ground flora includes sedges, field mint, speckled alder, and jewelweed. This phase is mostly limited to active flood plains where trees generally do not grow.

PCS—Picea-Chamaedaphne-Sphagnum habitat type. This habitat type has a potential climax overstory dominated by black spruce. Other species include tamarack and northern whitecedar. The dominant ground flora includes leatherleaf, bog rosemary, pale laurel, sphagnum mosses, Labrador tea, sedges, and Canada blueberry.

PO—Picea-Osmunda habitat type. This habitat type has a potential climax overstory dominated by black spruce and northern whitecedar. Other species include eastern hemlock and white pine. The dominant ground flora includes cinnamon fern, sphagnum mosses, sedges, marsh marigold, and goldthread.

TAM—Tsuga-Acer-Mitchella habitat type. This habitat type has a potential climax overstory dominated by sugar maple and eastern hemlock. Other species include red maple, American basswood, white ash, and yellow birch. The dominant ground flora includes sedges, wild sarsaparilla, partridgeberry, horsetail, bigleaf aster, Canada mayflower, ladyfern, American fly honeysuckle, rosy twisted stalk, and northern dewberry. The potential productivity is moderately low for northern hardwoods and moderate for aspen.

TAM-Eq—Tsuga-Acer-Mitchella habitat type, Equisetum phase. This habitat type occurs in the wetter areas within the TAM habitat type. It has a potential climax overstory dominated by sugar maple and eastern hemlock. Other species include black ash, American elm, red maple, American basswood, white ash, and yellow

birch. The dominant ground flora includes sedges, wild sarsaparilla, partridgeberry, horsetail, bigleaf aster, Canada mayflower, ladyfern, American fly honeysuckle, rosy twisted stalk, and northern dewberry. The potential productivity is moderately low for northern hardwoods and moderate for aspen.

TM—Tsuga-Maianthemum habitat type. This habitat type has a potential climax overstory dominated by eastern hemlock, sugar maple, and red maple. Other species include yellow birch, white spruce, balsam fir, eastern white pine, northern red oak, northern whitecedar, and American basswood. The dominant ground flora includes wild lily-of-the-valley, brackenfern, sedges, American starflower, and wild sarsaparilla. The potential productivity is moderate for northern hardwoods, moderately high for aspen, and high for red pine and jack pine.

TMC—Tsuga-Maianthemum-Coptis habitat type. This habitat type has a potential climax overstory dominated by eastern hemlock and red maple. Yellow birch is common. Other species include balsam fir, white spruce, and northern whitecedar. The dominant ground flora includes wild lily-of-the-valley, goldthread, yellow beadlily, bunchberry, American starflower, wood sorrel, and spinulose shield fern. The potential productivity is moderate for northern hardwoods and aspen.

TMC-D—Tsuga-Maianthemum-Coptis habitat type, Dryopteris phase. This habitat type has a potential climax overstory dominated by eastern hemlock and red maple. Sugar maple and yellow birch are common. Other species include balsam fir, white spruce, and northern whitecedar. The dominant ground flora includes wild lily-of-the-valley, goldthread, yellow beadlily, bunchberry, American starflower, spinulose shield fern, long beech fern, oak fern, wood sorrel, and hairy Solomon's seal. The potential productivity is moderate for northern hardwoods and aspen.

TMC-V—Tsuga-Maianthemum-Coptis habitat type, Vaccinium phase. This habitat type has a potential climax overstory dominated by eastern hemlock and red maple. Yellow birch is common. Other species include balsam fir, white spruce, and northern whitecedar. The dominant ground flora includes wild lily-of-the-valley, goldthread, yellow beadlily, bunchberry, American starflower, Canada blueberry, low bush blueberry, wood sorrel, and spinulose shield fern. The potential productivity is moderate for northern hardwoods and aspen.

TMV—Tsuga-Maianthemum-Vaccinium habitat type. This habitat type has a potential climax overstory dominated by eastern hemlock and red maple. Other species include sugar maple, eastern white pine, balsam fir, white spruce, and northern red oak. The dominant ground flora includes Canada blueberry, wild sarsaparilla, brackenfern, wild lily-of-the-valley, low bush blueberry, yellow beadlily, and wood betony. The potential productivity is moderate for northern hardwoods, moderately high for aspen, and high for red pine and jack pine.

TTM—Tsuga-Thuja-Mitella habitat type. This habitat type has a potential climax overstory dominated by northern whitecedar and eastern hemlock. Other species include balsam fir and red maple. The dominant ground flora includes naked miterwort, sedges, wild lily-of-the-valley, American starflower, twinflower, fringed polygala, sphagnum mosses, and bunchberry.

TTP—Tsuga-Thuja-Petasites habitat type. This habitat type has a potential climax overstory dominated by eastern hemlock and northern whitecedar. Other species include balsam fir, red maple, and sugar maple. The dominant ground flora includes sweet coltsfoot, bigleaf aster, sedges, barren strawberry, northern dewberry, bunchberry, wild sarsaparilla, and black snakeroot. The potential productivity is moderately low for aspen.

TTS—Tsuga-Thuja-Sphagnum habitat type. This habitat type has a potential climax overstory dominated by eastern hemlock and northern whitecedar. Other species include balsam fir, black spruce, and red maple. The dominant ground flora includes sphagnum mosses, goldthread, bunchberry, sedges, wild lily-of-the-valley, American starflower, horsetails, and wood sorrel.

Forestland Plant Communities

Table 9 lists the common trees and characteristic vegetation typically associated with selected soils in the survey area. The common plant names and the plant symbols are those on a national list of plant names (USDA/NRCS, PLANTS database).

Recreation

The soils of the survey area are rated in tables 10a and 10b according to limitations that affect their suitability for recreation. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The ratings in the tables are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, vegetation, access to water, potential water impoundment sites, and access to public sewer lines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation also are important. Soils that are subject to flooding are limited for recreational uses by the duration and intensity of flooding and the season when flooding occurs. In planning recreational facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

The information in tables 10a and 10b can be supplemented by other information in this survey, for example, interpretations for building site development, construction materials, sanitary facilities, and water management.

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The ratings are based on the soil properties that affect the ease of developing camp areas and the performance of the areas after development. Slope, stoniness, and depth to bedrock or a cemented pan are the main concerns affecting the development of camp areas. The soil properties that affect the performance of the areas after development are those that influence trafficability and promote the growth of vegetation, especially in heavily used areas. For good trafficability, the surface of camp areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Picnic areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The ratings are based on the soil properties that affect the ease of developing picnic areas and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of picnic areas. For good trafficability, the surface of picnic areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Playgrounds require soils that are nearly level, are free of stones, and can withstand intensive foot traffic. The ratings are based on the soil properties that affect the ease of developing playgrounds and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of playgrounds. For good trafficability, the surface of the playgrounds should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties that affect trafficability and erodibility. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

Golf fairways are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer. The suitability of the soil for traps, tees, roughs, and greens is not considered in the ratings.

Wildlife Habitat

Soils affect the kind and amount of vegetation that is available to wildlife as food and cover. They also affect the construction of water impoundments. The kind and abundance of wildlife depend largely on the amount and distribution of food, cover, and water. Wildlife habitat can be created or improved by planting appropriate vegetation, by maintaining the existing plant cover, or by promoting the natural establishment of desirable plants.

In table 11, the soils in the survey area are rated according to their potential for providing habitat for various kinds of wildlife. This information can be used in planning parks, wildlife refuges, nature study areas, and other developments for wildlife; in selecting soils that are suitable for establishing, improving, or maintaining specific elements of wildlife habitat; and in determining the intensity of management needed for each element of the habitat.

The potential of the soil is rated good, fair, poor, or very poor. A rating of *good* indicates that the element or kind of habitat is easily established, improved, or maintained. Few or no limitations affect management, and satisfactory results can be expected. A rating of *fair* indicates that the element or kind of habitat can be established, improved, or maintained in most places. Moderately intensive

management is required for satisfactory results. A rating of *poor* indicates that limitations are severe for the designated element or kind of habitat. Habitat can be created, improved, or maintained in most places, but management is difficult and must be intensive. A rating of *very poor* indicates that restrictions for the element or kind of habitat are very severe and that unsatisfactory results can be expected. Creating, improving, or maintaining habitat is impractical or impossible.

The elements of wildlife habitat are described in the following paragraphs.

Grain and seed crops are domestic grains and seed-producing herbaceous plants. Soil properties and features that affect the growth of grain and seed crops are depth of the root zone, texture of the surface layer, available water capacity, wetness, slope, surface stoniness, and flooding. Soil temperature and soil moisture also are considerations. Examples of grain and seed crops are corn, wheat, oats, and barley.

Grasses and legumes are domestic perennial grasses and herbaceous legumes. Soil properties and features that affect the growth of grasses and legumes are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, flooding, and slope. Soil temperature and soil moisture also are considerations. Examples of grasses and legumes are fescue, lovegrass, brome grass, clover, and alfalfa.

Wild herbaceous plants are native or naturally established grasses and forbs, including weeds. Soil properties and features that affect the growth of these plants are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, and flooding. Soil temperature and soil moisture also are considerations. Examples of wild herbaceous plants are bluestem, goldenrod, beggarweed, wheatgrass, and grama.

Hardwood trees and woody understory produce nuts or other fruit, buds, catkins, twigs, bark, and foliage. Soil properties and features that affect the growth of hardwood trees and shrubs are depth of the root zone, available water capacity, and wetness. Examples of these plants are oak, poplar, cherry, apple, hawthorn, dogwood, hickory, blackberry, and blueberry. Examples of fruit-producing shrubs that are suitable for planting on soils rated *good* are Russian-olive, autumn-olive, and crabapple.

Coniferous plants furnish browse and seeds. Soil properties and features that affect the growth of coniferous trees, shrubs, and ground cover are depth of the root zone, available water capacity, and wetness. Examples of coniferous plants are pine, spruce, fir, cedar, and juniper.

Wetland plants are annual and perennial wild herbaceous plants that grow on moist or wet sites. Submerged or floating aquatic plants are excluded. Soil properties and features affecting wetland plants are texture of the surface layer, wetness, reaction, salinity, slope, and surface stoniness. Examples of wetland plants are smartweed, wild millet, wild rice, saltgrass, cordgrass, rushes, sedges, and reeds.

Shallow water areas have an average depth of less than 5 feet. Some are naturally wet areas. Others are created by dams, levees, or other water-control structures. Soil properties and features affecting shallow water areas are depth to bedrock, wetness, surface stoniness, slope, and permeability. Examples of shallow water areas are marshes, waterfowl feeding areas, and ponds.

The habitat for various kinds of wildlife is described in the following paragraphs.

Habitat for openland wildlife consists of cropland, pasture, meadows, and areas that are overgrown with grasses, herbs, shrubs, and vines. These areas produce grain and seed crops, grasses and legumes, and wild herbaceous plants. Wildlife attracted to these areas include bobwhite quail, pheasant, meadowlark, field sparrow, cottontail, and red fox.

Habitat for woodland wildlife consists of areas of deciduous and/or coniferous plants and associated grasses, legumes, and wild herbaceous plants. Wildlife

attracted to these areas include wild turkey, ruffed grouse, woodcock, thrushes, woodpeckers, squirrels, gray fox, raccoon, deer, and bear.

Habitat for wetland wildlife consists of open, marshy or swampy shallow water areas. Some of the wildlife attracted to such areas are ducks, geese, herons, shore birds, muskrat, mink, and beaver.

Engineering

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, construction materials, and water management. The ratings are based on observed performance of the soils and on the estimated data and test data in the "Soil Properties" section.

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet of the surface, soil wetness, depth to a water table, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, earthfill, and topsoil; plan drainage systems, irrigation systems, ponds, terraces, and other structures for soil and water conservation; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

Building Site Development

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Tables 12a and 12b show the degree and kind of soil limitations that affect dwellings with and without basements, small commercial buildings, local roads and streets, and shallow excavations.

The ratings in the tables are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and

grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Sanitary Facilities

Tables 13a and 13b show the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 60 inches is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, flooding, large stones, and content of organic matter.

Soil permeability is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a permeability rate of more than 2 inches per hour are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches, if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

A *trench sanitary landfill* is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include permeability, depth to bedrock or a cemented pan, depth to a water table, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet. For deeper trenches, onsite investigation may be needed.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the hazard of ground-water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

In an *area sanitary landfill*, solid waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site. A final cover of soil material at least 2 feet thick is placed over the completed landfill. The ratings in the table are based on the soil properties that affect trafficability and the risk of pollution. These properties include flooding, permeability, depth to a water table, ponding, slope, and depth to bedrock or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If permeability is too rapid or if fractured bedrock, a fractured cemented pan, or the water table is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow along the surface of the soils in the steeper areas and cause difficult seepage problems.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse daily during wet and dry periods. These properties include soil texture, depth to a water table, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock, a cemented pan, or the water table to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. It should not have excess sodium, salts, or lime and should not be too acid.

Construction Materials

Tables 14a and 14b give information about the soils as potential sources of gravel, sand, reclamation material, roadfill, and topsoil. Normal compaction, minor processing, and other standard construction practices are assumed.

Sand and gravel are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In table 14a, only the likelihood of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the bottom layer of the soil contains sand or gravel, the soil is considered a likely source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

The soils are rated *good*, *fair*, or *poor* as potential sources of sand and gravel. A rating of *good* or *fair* means that the source material is likely to be in or below the soil. The bottom layer and the thickest layer of the soils are assigned numerical ratings. These ratings indicate the likelihood that the layer is a source of sand or gravel. The number 0.00 indicates that the layer is a poor source. The number 1.00 indicates that the layer is a good source. A number between 0.00 and 1.00 indicates the degree to which the layer is a likely source.

In table 14b, the soils are rated *good*, *fair*, or *poor* as potential sources of reclamation material, roadfill, and topsoil. The features that limit the soils as sources of these materials are specified in the table. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of reclamation material, roadfill, or topsoil. The lower the number, the greater the limitation.

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do not apply to quarries and other mined areas that require an offsite source of reconstruction material. The ratings are based on the soil properties that affect

erosion and stability of the surface and the productive potential of the reconstructed soil. These properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential).

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Water Management

Tables 15a and 15b give information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for pond reservoir areas; embankments, dikes, and levees; aquifer-fed excavated ponds; grassed waterways; and drainage. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the permeability of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. Embankments that have zoned construction (core and shell) are not considered. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A high water table affects the amount of usable material. It also affects trafficability.

Aquifer-fed excavated ponds are pits or dugouts that extend to a ground-water aquifer or to a depth below a permanent water table. Excluded are ponds that are fed only by surface runoff and embankment ponds that impound water 3 feet or more above the original surface. Excavated ponds are affected by depth to a permanent water table, permeability of the aquifer, and quality of the water as inferred from the salinity of the soil. Depth to bedrock and the content of large stones affect the ease of excavation.

Grassed waterways are natural or constructed channels, generally broad and shallow, that conduct surface water to outlets at a nonerosive velocity. Large stones, wetness, slope, and depth to bedrock or a cemented pan affect the construction of grassed waterways. A hazard of wind erosion, low available water capacity, restricted rooting depth, toxic substances such as salts and sodium, and restricted permeability adversely affect the growth and maintenance of the grass after construction.

Drainage is the removal of excess surface and subsurface water from the soil. How easily and effectively the soil is drained depends on the depth to bedrock, a cemented pan, or other layers that affect the rate of water movement; permeability; depth to a high water table or depth of standing water if the soil is subject to ponding; slope; susceptibility to flooding; subsidence of organic layers; and the potential for frost action. Excavating and grading and the stability of ditchbanks are affected by depth to bedrock or a cemented pan, large stones, slope, and the hazard of cutbanks caving. The productivity of the soil after drainage is adversely affected by extreme acidity or by toxic substances in the root zone, such as salts, sodium, and sulfur. Availability of drainage outlets is not considered in the ratings.

Soil Properties

Data relating to soil properties are collected during the course of the soil survey.

Soil properties are determined by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine particle-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils.

The estimates of soil properties are shown in tables. They include engineering index properties, physical and chemical properties, and pertinent soil and water features.

Engineering Index Properties

Table 16 gives the engineering classifications and the range of engineering properties for the layers of each soil in the survey area.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, "gravelly." Textural terms are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

Rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an oven-dry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and plasticity index (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

Physical Properties of the Soils

Table 17 shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In the table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, permeability, plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (oven-dry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at $1/3$ - or $1/10$ -bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Permeability (Ksat) refers to the ability of a soil to transmit water or air. The term "permeability," as used in soil surveys, indicates saturated hydraulic conductivity (Ksat). The estimates in the table indicate the rate of water movement, in inches per hour, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water

per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at $\frac{1}{3}$ - or $\frac{1}{10}$ -bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Erosion factors are shown in the table as the K factor and the T factor. *Erosion factor K* indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor K_f indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the "National Soil Survey Handbook," which is available in local offices of the Natural Resources Conservation Service or on the Internet (<http://soils.usda.gov/technical/>).

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Chemical Properties of the Soils

Table 18 shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Soil reaction is a measure of acidity or alkalinity. The pH of each soil horizon is based on many field tests. For many soils, values have been verified by laboratory

analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In the table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Cation-exchange capacity is the total amount of extractable bases that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable bases plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Calcium carbonate equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil. Incorporating nitrogen fertilizer into calcareous soils helps to prevent nitrite accumulation and ammonium-N volatilization.

Soil Features

Table 19 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, ortstein, dense layers, and frozen layers. The table indicates the thickness and hardness of the restrictive layer, both of which significantly affect the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, permeability, content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of

uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low*, *moderate*, or *high*, is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low*, *moderate*, or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Water Features

Soil moisture status is an estimate of the fluctuating water content in a soil. It greatly influences vegetation type and plant growth; physical properties of soils, such as permeability, workability, strength, linear extensibility, and frost action; and chemical interactions and transport. Many other properties, qualities, and interpretations also are affected. Soil moisture status is important in the classification of soils, wetland, and habitat.

Table 20 gives estimates of soil moisture for each component of a map unit at various depths for every month of the year. The depths displayed are representative values that are indicative of conditions that occur most commonly. *Dry* indicates a moisture condition under which most plants (especially crops) cannot extract water for growth. *Moist* indicates a moisture condition under which soil water is most readily available for plant growth. *Wet* indicates a condition under which water will stand in an unlined hole or at least a condition under which the soil is too wet for the growth of most agricultural species. A moisture status of 4.0-6.7 (wet) indicates that most of the time the component is saturated at some depth between 4.0 feet and 6.7 feet during the month designated. In some years the soil may be saturated at a depth of less than 4.0 feet or more than 6.7 feet; however, field observations indicate that the soil will be saturated between these depths in most years. In the summer, the soil may show the effects of drying plus intermittent rains that result in a moist or wet layer over a dry layer that gets moist or wet again.

Table 21 gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

The *months* in the table indicate the portion of the year in which the feature is most likely to be a concern.

Water table refers to a saturated zone in the soil. Table 21 indicates, by month, depth to the top (*upper limit*) and base (*lower limit*) of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

Table 21 also shows the *kind of water table*, that is, apparent or perched. An *apparent* water table is a thick zone of free water in the soil. It is indicated by the level at which water stands in an uncased borehole after adequate time is allowed for adjustment in the surrounding soil. A *perched* water table is water standing above an unsaturated zone. In places an upper, or perched, water table is separated from a lower one by a dry zone.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. The table indicates *surface water depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and frequency are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and *very frequent* that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Soil Survey of Gogebic County, Michigan

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1999). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. Table 22 shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is Alfisol.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Udalf (*Ud*, meaning humid, plus *alf*, from Alfisol).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is Glossudalfs (*Gloss*, meaning tongue, plus *udalfs*, the suborder of the Alfisols that has a udic moisture regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. An example is Oxyaquic Glossudalfs.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineralogy class, cation-exchange activity class, soil temperature regime, soil depth, and reaction class. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine-loamy, mixed, superactive, frigid Oxyaquic Glossudalfs.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile.

Soil Series and Their Morphology

In this section, each soil series recognized in the survey area is described. Characteristics of the soil and the material in which it formed are identified for each series. A pedon, a small three-dimensional area of soil, that is typical of the series in

the survey area is described. The detailed description of each soil horizon follows standards in the "Soil Survey Manual" (Soil Survey Division Staff, 1993). Many of the technical terms used in the descriptions are defined in "Soil Taxonomy" (Soil Survey Staff, 1999) and in "Keys to Soil Taxonomy" (Soil Survey Staff, 2006). Unless otherwise indicated, colors in the descriptions are for moist soil. The official pedon description and the range of important characteristics are available online at <http://soils.usda.gov>.

Allendale Series

The Allendale series consists of very deep, somewhat poorly drained soils on lake plains and ground moraines. These soils are moderately deep to clayey material. They formed in sandy sediments and in the underlying clayey lacustrine or till deposits. Permeability is rapid in the upper sandy layers and very slow in the underlying clayey layers. Slopes range from 0 to 6 percent.

Typical pedon of Allendale loamy fine sand, 1,060 feet east and 2,300 feet south of the northwest corner of sec. 28, T. 49 N., R. 38 W., Stannard Township, Ontonagon County, Michigan:

- Oe—0 to 1 inch; black (7.5YR 2.5/1), moderately decomposed plant material.
- A—1 to 2 inches; black (7.5YR 2.5/1) loamy fine sand; moderate medium granular structure; friable; many very fine to coarse roots; about 3 percent gravel; moderately acid; clear smooth boundary.
- E—2 to 6 inches; brown (7.5YR 5/3) loamy sand; moderate fine subangular blocky structure; friable; common very fine to coarse roots; about 3 percent gravel; strongly acid; clear wavy boundary.
- Bhs—6 to 15 inches; dark reddish brown (5YR 3/3) fine sand and fine sandy loam; moderate medium subangular blocky structure; very friable; common very fine to medium roots; about 3 percent gravel; strongly acid; clear broken boundary.
- Bs—15 to 23 inches; reddish brown (5YR 4/4) fine sand and loamy fine sand; moderate medium subangular blocky structure; very friable; few very fine to medium roots; common yellowish red (5YR 5/6) masses of oxidized iron; about 3 percent gravel; strongly acid; abrupt smooth boundary.
- E'—23 to 24 inches; reddish brown (5YR 5/4) loamy fine sand and fine sandy loam; weak coarse subangular blocky structure; friable; few very fine to medium roots; common yellowish red (5YR 5/6) masses of oxidized iron; very strongly acid; abrupt smooth boundary.
- 2Bt1—24 to 35 inches; reddish brown (2.5YR 4/4) fine sandy loam and silty clay loam; weak coarse prismatic structure; firm; few very fine to medium roots; few reddish brown (5YR 4/4) clay films; common pinkish gray (7.5YR 6/2) masses of reduced iron; common yellowish red (5YR 5/8) masses of oxidized iron; about 2 percent gravel; very strongly acid; gradual wavy boundary.
- 2Bt2—35 to 60 inches; reddish brown (2.5YR 4/4) silty clay loam; weak very coarse prismatic structure; very firm; few fine and medium roots; few reddish brown (5YR 4/4) clay films; few pinkish gray (7.5YR 6/2) masses of reduced iron; about 1 percent cobbles and 2 percent gravel; slightly acid.

Amasa Series

The Amasa series consists of very deep, well drained soils on outwash plains, eskers, stream terraces, and moraines. These soils formed in silty and loamy material over sandy and gravelly deposits. Permeability is moderate in the upper part of the profile and rapid or very rapid in the lower part. Slopes range from 0 to 70 percent.

Soil Survey of Gogebic County, Michigan

Typical pedon of Amasa cobbly silt loam, 350 feet north and 1,450 feet west of the center of sec. 28, T. 48 N., R. 31 W., Spurr Township, Baraga County, Michigan:

- Oe—0 to 1 inch; black (5YR 2.5/1), partially decomposed plant material; weak very fine granular structure; very friable; many very fine to coarse roots; extremely acid; abrupt smooth boundary.
- E—1 to 4 inches; reddish gray (5YR 5/2) cobbly silt loam; weak medium subangular blocky structure; friable; common very fine to coarse roots; about 20 percent cobbles; extremely acid; abrupt wavy boundary.
- Bhs—4 to 7 inches; dark reddish brown (5YR 3/3) silt loam; weak fine and medium subangular blocky structure; friable; many very fine to coarse roots; about 5 percent cobbles; extremely acid; clear broken boundary.
- Bs1—7 to 23 inches; reddish brown (5YR 4/4) very fine sandy loam; weak very fine and fine subangular blocky structure; friable; common very fine to coarse roots; about 3 percent cobbles and 3 percent gravel; extremely acid; gradual wavy boundary.
- Bs2—23 to 28 inches; brown (7.5YR 4/4) very fine sandy loam; weak very fine and medium subangular blocky structure; friable; common very fine to coarse roots; about 5 percent cobbles and 5 percent gravel; extremely acid; abrupt wavy boundary.
- 2C1—28 to 41 inches; yellowish brown (10YR 5/6) sand; single grain; loose; few fine roots; about 5 percent gravel; very strongly acid; clear wavy boundary.
- 2C2—41 to 80 inches; dark yellowish brown (10YR 4/4 and 4/6) very gravelly sand; single grain; loose; about 40 percent gravel and 5 percent cobbles; very strongly acid.

Amnicon Series

The Amnicon series consists of very deep, moderately well drained soils on till plains. These soils formed in clayey till. Permeability is extremely slow or very slow. Slopes range from 0 to 35 percent.

Typical pedon of Amnicon silt loam, 1,600 feet south and 420 feet west of the northeast corner of sec. 7, T. 48 N., R. 14 W., Superior Township, Douglas County, Wisconsin:

- A—0 to 2 inches; dark brown (7.5YR 3/2) silt loam; weak medium granular structure; friable; many fine to coarse roots; about 1 percent gravel; moderately acid; abrupt smooth boundary.
- E—2 to 5 inches; brown (7.5YR 4/2) silty clay loam; moderate thick platy structure; friable; many fine to coarse roots; about 1 percent gravel; very strongly acid; abrupt wavy boundary.
- E/B—5 to 10 inches; 70 percent brown (7.5YR 4/2) silty clay loam (E); moderate thick platy structure; friable; extends as tongues into and surrounds remnants of reddish brown (5YR 4/4) silty clay (Bt); strong medium subangular blocky structure; firm; many fine and medium roots; strongly acid; clear wavy boundary.
- B/E—10 to 16 inches; 80 percent reddish brown (5YR 4/4) clay (Bt); strong medium angular blocky structure; common reddish brown (2.5YR 4/4) clay films; penetrated by tongues of reddish brown (5YR 5/3) silty clay (E); strong medium angular blocky structure; firm; common fine to coarse roots; common yellowish red (5YR 4/6) masses of oxidized iron; neutral; clear wavy boundary.
- Bt—16 to 24 inches; dark reddish brown (2.5YR 3/4) clay; moderate fine and very fine angular blocky structure; firm; common fine to coarse roots; common reddish brown (2.5YR 4/4) clay films; neutral; clear wavy boundary.
- Btk1—24 to 31 inches; dark reddish brown (2.5YR 3/4) clay; moderate fine and very fine angular blocky structure; firm; common fine and medium roots; common

reddish brown (2.5YR 4/4) clay films; few fine and medium light reddish brown (2.5YR 6/4) soft masses of calcium carbonate; strongly effervescent; moderately alkaline; clear wavy boundary.

Btk2—31 to 43 inches; reddish brown (2.5YR 4/4) clay; weak coarse prismatic structure; firm; few fine roots; common reddish brown (2.5YR 4/3) clay films; common fine and medium light reddish brown (2.5YR 6/4) soft masses of calcium carbonate; violently effervescent; about 1 percent gravel; moderately alkaline; gradual wavy boundary.

C—43 to 67 inches; reddish brown (2.5YR 4/4) clay; massive; firm; common light reddish brown (2.5YR 6/4) soft masses of calcium carbonate; violently effervescent; about 1 percent gravel; strongly alkaline.

Annalake Series

The Annalake series consists of very deep, moderately well drained soils on lake plains, till plains, and stream terraces. These soils formed in stratified loamy and sandy deposits. Permeability is moderate. Slopes range from 0 to 35 percent.

Typical pedon of Annalake loam, 1,540 feet north and 1,540 feet west of the southeast corner of sec. 1, T. 51 N., R. 40 W., Ontonagon Township, Ontonagon County, Michigan:

Ap—0 to 9 inches; dark brown (7.5YR 3/3) loam; moderate medium granular structure; friable; common very fine to coarse roots; very strongly acid; abrupt smooth boundary.

Bs—9 to 16 inches; dark brown (7.5YR 3/4) and brown (7.5YR 4/4) fine sandy loam; moderate medium subangular blocky structure; friable; common very fine to coarse roots; very strongly acid; clear wavy boundary.

E—16 to 31 inches; brown (7.5YR 5/3 and 4/4), stratified loamy very fine sand, silt loam, and loamy fine sand; weak very thick platy structure parting to moderate medium and coarse subangular blocky; friable; common fine and medium roots; common yellowish red (5YR 5/8 and 5/6) masses of oxidized iron; strongly acid; clear wavy boundary.

E and Bt—31 to 48 inches; brown (7.5YR 5/3 and 5/4), stratified sand, fine sand, loamy fine sand, and silt loam; weak very thick platy structure; friable; common fine and medium roots; common yellowish red (5YR 5/6 and 5/8) masses of oxidized iron; strongly acid; clear wavy boundary.

Bt and E—48 to 61 inches; reddish brown (2.5YR 5/4) and brown (7.5YR 5/3), stratified sand, fine sand, loamy fine sand, and silt loam; weak very thick platy structure parting to weak coarse subangular blocky; friable; few fine and medium roots; common yellowish red (5YR 5/6) masses of oxidized iron; moderately acid; clear wavy boundary.

C—61 to 80 inches; reddish brown (5YR 5/4 and 5/3), stratified fine sand, loamy fine sand, silt loam, and silt; massive; friable; common yellowish red (5YR 5/6) masses of oxidized iron; moderately acid.

Arcadian Series

The Arcadian series consists of shallow, well drained soils on rocky knolls and ridges on end moraines, till plains, and postglacial lake shorelines. These soils formed in gravelly or cobbly loamy material overlying igneous or metamorphic bedrock. Permeability is moderate. Slopes range from 1 to 75 percent.

Typical pedon of Arcadian very gravelly fine sandy loam, 2,180 feet north and 250 feet east of the southwest corner of sec. 31, T. 59 N., R. 29 W., Eagle Harbor Township, Keweenaw County, Michigan:

- Oa—0 to 3 inches; black (7.5YR 2.5/1), well decomposed forest litter.
- E—3 to 5 inches; dark brown (7.5YR 4/2) very gravelly fine sandy loam; moderate medium granular structure; friable; many fine to coarse roots; about 45 percent gravel, 5 percent cobbles, and 1 percent stones; strongly acid, abrupt wavy boundary.
- Bhs—5 to 12 inches; dark reddish brown (7.5YR 3/3) very gravelly very fine sandy loam; moderate medium subangular blocky structure; friable; many fine to coarse roots; about 50 percent gravel, 5 percent cobbles, and 1 percent stones; strongly acid; abrupt wavy boundary.
- 2R—12 inches; conglomerate bedrock.

Argonne Series

The Argonne series consists of moderately well drained soils on drumlins and moraines. These soils are moderately deep to a fragipan. They formed dominantly in loamy till or glacial mudflow sediment. Permeability is moderate above the fragipan, slow in the fragipan, and moderate or moderately rapid below the fragipan. Slopes range from 0 to 35 percent.

Typical pedon of Argonne sandy loam, very stony, 1,250 feet west and 850 feet north of the southeast corner of sec. 26, T. 36 N., R. 16 E.; USGS Goodman SW, Wisconsin, topographic quadrangle; lat. 45 degrees 33 minutes 58 seconds N. and long. 88 degrees 27 minutes 05 seconds W., Forest County, Wisconsin; about 6.5 miles south of Armstrong Creek:

- Oa—0 to 2 inches; muck (sapric material), black (10YR 2/1) broken face and rubbed; about 20 percent fibers, 5 percent rubbed; weak fine granular structure; very friable; many very fine and fine and common medium and coarse roots; very strongly acid; abrupt wavy boundary.
- E—2 to 5 inches; brown (7.5YR 5/2) sandy loam, pinkish gray (7.5YR 7/2) dry; weak thick platy structure; friable; many very fine and fine and common medium and coarse roots; about 1 percent gravel; strongly acid; clear wavy boundary.
- Bs1—5 to 9 inches; dark brown (7.5YR 3/4) sandy loam; weak medium subangular blocky structure; friable; many very fine and fine and common medium and coarse roots; about 1 percent gravel; very strongly acid; clear wavy boundary.
- Bs2—9 to 15 inches; brown (7.5YR 4/4) sandy loam; weak medium subangular blocky structure; friable; common very fine and fine and few medium and coarse roots; about 1 percent gravel; very strongly acid; clear wavy boundary.
- E/B—15 to 29 inches; 60 percent brown (10YR 5/3) sandy loam (E), very pale brown (10YR 7/3) dry; moderate medium platy structure; friable; extends as tongues into or surrounds remnants of brown (7.5YR 4/4) sandy loam (Bt); moderate medium subangular blocky structure; friable; few very fine and fine roots; few faint brown (7.5YR 4/3) clay films on faces of peds; about 5 percent gravel; strongly acid; clear wavy boundary.
- B/Ex—29 to 39 inches; 60 percent brown (7.5YR 4/4) sandy loam (Bt); moderate coarse subangular blocky structure; firm; brittle; few faint brown (7.5YR 4/3) clay films on faces of peds; penetrated by tongues of brown (10YR 5/3) sandy loam (E), very pale brown (10YR 7/3) dry; moderate medium subangular blocky structure; firm; brittle; tends to part along horizontal cleavage planes inherited from the parent material; few very fine and fine roots; common fine distinct and prominent strong brown (7.5YR 4/6) masses of iron accumulation; about 10 percent gravel and 1 percent cobbles; strongly acid; clear wavy boundary.
- Btx—39 to 54 inches; brown (7.5YR 4/4) sandy loam; moderate coarse subangular blocky structure; firm; brittle; tends to part along horizontal cleavage planes inherited from the parent material; few faint brown (7.5YR 4/3) clay films on faces

of peds; few fine distinct strong brown (7.5YR 4/6) masses of iron accumulation; about 12 percent gravel and 1 percent cobbles; slightly acid; clear wavy boundary.

C—54 to 82 inches; dark yellowish brown (10YR 4/4) gravelly sandy loam; massive; friable; about 20 percent gravel and 1 percent cobbles; slightly acid.

Arnheim Series

The Arnheim series consists of very deep, poorly drained soils on flood plains. These soils formed in stratified alluvium. Permeability is moderate. Slopes are 0 to 1 percent.

Typical pedon of Arnheim mucky silt loam, 125 feet north and 2,000 feet west of the southeast corner of sec. 2, T. 51 N., R. 34 W., Baraga Township, Baraga County, Michigan:

A—0 to 5 inches; dark brown (7.5YR 3/2) mucky silt loam; moderate medium granular structure; friable; many very fine to coarse roots; moderately acid; clear smooth boundary.

Cg—5 to 10 inches; dark grayish brown (10YR 4/2) silt loam; moderate medium subangular blocky structure; friable; many very fine to coarse roots; many strong brown (7.5YR 5/6) masses of oxidized iron; moderately acid; clear smooth boundary.

C1—10 to 15 inches; reddish brown (5YR 4/3) very fine sandy loam; massive; firm; common very fine to coarse roots; many strong brown (7.5YR 5/6) masses of oxidized iron; moderately acid; abrupt smooth boundary.

C2—15 to 24 inches; reddish brown (5YR 4/3) silt loam; massive; firm; few fine roots; common strong brown (7.5YR 5/6) masses of oxidized iron; moderately acid; abrupt smooth boundary.

C3—24 to 60 inches; reddish brown (5YR 4/3), stratified loamy fine sand, very fine sandy loam, and fine sandy loam; massive; friable; strongly acid.

Ausable Series

The Ausable series consists of very deep, very poorly drained soils on flood plains. These soils formed in thin layers of organic material and in sandy alluvium. Permeability is moderate or moderately rapid in the organic material and rapid in the sandy material. Slopes range from 0 to 2 percent.

Typical pedon of Ausable muck, 170 feet south and 550 feet west of the northeast corner of sec. 4, T. 44 N., R. 39 W., Watersmeet Township, Gogebic County, Michigan:

Oa—0 to 8 inches; muck, black (10YR 2/1) broken face and rubbed; about 20 percent fiber, 5 percent rubbed; weak medium granular structure; very friable; primarily herbaceous fiber; about 1 percent gravel; slightly acid; clear wavy boundary.

C1—8 to 16 inches; brown (10YR 4/3) sand; single grain; loose; about 3 percent gravel; neutral; clear wavy boundary.

C2—16 to 25 inches; dark grayish brown (10YR 4/2) loamy fine sand with thin layers of black (10YR 2/1) muck; weak thick platy structure; very friable; neutral; clear wavy boundary.

Cg1—25 to 36 inches; dark gray (10YR 4/1) very gravelly sand; single grain; loose; about 40 percent gravel; slightly alkaline; gradual wavy boundary.

Cg2—36 to 45 inches; brown (7.5YR 4/3) very gravelly sand; single grain; loose; about 40 percent gravel; slightly alkaline; gradual wavy boundary.

Cg3—45 to 80 inches; brown (7.5YR 4/2) very gravelly coarse sand; single grain; loose; about 40 percent gravel; slightly alkaline.

Beechwood Series

The Beechwood series consists of very deep, somewhat poorly drained soils on ground moraines. These soils formed in loamy till. Permeability is moderate. Slopes range from 0 to 4 percent.

Typical pedon of Beechwood silt loam, about 2.2 miles west of Clark Lake along Underwood Tower Road; 100 feet north and 400 feet east of the southwest corner of sec. 16, T. 49 N., R. 44 W., Ontonagon County, Michigan:

- A—0 to 8 inches; dark brown (7.5YR 3/2) and brown (7.5YR 4/4) silt loam; weak fine granular structure; very friable; many very fine to very coarse roots; about 3 percent gravel; very strongly acid; abrupt wavy boundary.
- Bw1—8 to 10 inches; brown (7.5YR 4/4) and strong brown (7.5YR 4/6) loam; weak fine and medium subangular blocky structure; friable; many very fine to coarse roots; common reddish brown (2.5YR 4/4) and strong brown (7.5YR 5/8) masses of oxidized iron; about 3 percent gravel; moderately acid; clear wavy boundary.
- Bw2—10 to 20 inches; reddish brown (5YR 4/4) fine sandy loam; weak medium and coarse subangular blocky structure; friable; common fine and medium roots; common yellowish red (5YR 5/8) masses of oxidized iron; about 5 percent gravel; neutral; gradual wavy boundary.
- Bw3—20 to 28 inches; reddish brown (5YR 4/4) fine sandy loam; weak fine and medium subangular blocky structure; firm; few fine roots; few greenish gray (10Y 6/1) masses of reduced iron; about 2 percent cobbles and 5 percent gravel; neutral; gradual wavy boundary.
- Bt—28 to 42 inches; reddish brown (5YR 4/4) fine sandy loam; weak fine and medium subangular blocky structure; firm; about 10 percent gravel; neutral; clear smooth boundary.
- BC—42 to 60 inches; reddish brown (5YR 4/4) fine sandy loam; weak fine and medium subangular blocky structure parting to weak thick platy; firm; about 10 percent gravel; neutral.

Belding Series

The Belding series consists of very deep, somewhat poorly drained soils on end moraines and till plains. These soils formed in loamy till. Permeability is moderate or moderately rapid in the upper part of the solum and moderately slow in the lower part of the solum and in the substratum. Slopes range from 0 to 6 percent.

Typical pedon of Belding fine sandy loam, 2,400 feet south and 1,885 feet east of the northwest corner of sec. 29, T. 51 N., R. 37 W., Greenland Township, Ontonagon County, Michigan:

- Oa—0 to 1 inch; black (7.5YR 2.5/1) muck; weak fine granular structure; very friable; many very fine to coarse roots; moderately acid; abrupt smooth boundary.
- A1—1 to 4 inches; dark brown (7.5YR 3/2) fine sandy loam; weak fine granular structure; very friable; many very fine to coarse roots; about 1 percent gravel; strongly acid; abrupt wavy boundary.
- A2—4 to 9 inches; dark brown (7.5YR 3/3) fine sandy loam; weak medium subangular blocky structure parting to weak fine and medium granular; friable; many fine to very coarse roots; about 1 percent gravel; strongly acid; clear wavy boundary.

- E—9 to 14 inches; brown (7.5YR 4/2) fine sandy loam; weak fine and medium subangular blocky structure; friable; few fine and medium roots; few strong brown (7.5YR 4/6) masses of oxidized iron; about 1 percent gravel; strongly acid; abrupt wavy boundary.
- Bs1—14 to 19 inches; brown (7.5YR 4/3) fine sandy loam; weak medium subangular blocky structure parting to weak fine subangular blocky; friable; few very fine and fine roots; many strong brown (7.5YR 4/6) masses of oxidized iron; many brown (7.5YR 4/2) masses of reduced iron; about 1 percent gravel; strongly acid; clear wavy boundary.
- Bs2—19 to 22 inches; brown (7.5YR 4/4) fine sandy loam; weak medium subangular blocky structure parting to weak fine subangular blocky; friable; few very fine and fine roots; common pinkish gray (7.5YR 6/2) masses of reduced iron; common strong brown (7.5YR 4/6) masses of oxidized iron; about 1 percent gravel; moderately acid; abrupt smooth boundary.
- 2Bt—22 to 34 inches; brown (7.5YR 4/3) silt loam; moderate medium subangular blocky structure; firm; few very fine and fine roots; common brown (7.5YR 4/3) clay films; many strong brown (7.5YR 4/6) masses of oxidized iron; about 3 percent gravel and 1 percent cobbles; slightly acid; clear wavy boundary.
- 2BCd—34 to 36 inches; brown (7.5YR 5/2) silt loam; moderate medium subangular blocky structure; firm; common strong brown (7.5YR 4/6) masses of oxidized iron; about 3 percent gravel and 1 percent cobbles; moderately alkaline; gradual wavy boundary.
- 2Cd—36 to 80 inches; grayish brown (10YR 5/2) silt loam; weak thick platy structure; firm; common strong brown (7.5YR 4/6) masses of oxidized iron; about 3 percent gravel and 1 percent cobbles; strongly alkaline.

Bergland Series

The Bergland series consists of very deep, poorly drained soils on ground moraines. These soils formed in clayey deposits. Permeability is very slow. Slopes range from 0 to 2 percent.

Typical pedon of Bergland mucky clay, 465 feet south and 680 feet west of the northeast corner of sec. 24, T. 48 N., R. 39 W., Stannard Township, Ontonagon County, Michigan:

- Oe—0 to 1 inch; dark reddish brown (5YR 2/2), partially decomposed organic material.
- A—1 to 3 inches; very dark gray (N 3/) mucky clay; weak very coarse angular blocky structure; firm; many fine roots; moderately acid; abrupt smooth boundary.
- Eg—3 to 8 inches; dark gray (N 4/) clay; moderate coarse angular blocky structure; very firm; many fine roots; slightly acid; abrupt wavy boundary.
- Bg—8 to 13 inches; gray (5Y 5/1) clay; moderate coarse angular blocky structure; very firm; few fine roots; many strong brown (7.5YR 5/8) and few dark gray (5Y 4/1) and olive gray (5Y 5/2) coatings in root channels and on faces of peds; slightly acid; gradual wavy boundary.
- Bw—13 to 25 inches; reddish brown (2.5YR 4/4) clay; moderate coarse angular blocky structure; very firm; common strong brown (7.5YR 5/8) and yellowish red (5YR 4/6) masses of oxidized iron; few gray (5Y 5/1) and light greenish gray (5GY 7/1) coatings in root channels and on faces of peds; neutral; gradual wavy boundary.
- C1—25 to 35 inches; reddish brown (2.5YR 4/4) clay; moderate coarse subangular blocky structure; very firm; few light greenish gray (5G 7/1) coatings on faces of peds; few small soft nodules of calcium carbonate; slight effervescence; moderately alkaline; gradual smooth boundary.

C2—35 to 48 inches; reddish brown (2.5YR 4/4) clay; moderate very coarse angular blocky structure; very firm; few light greenish gray (5G 7/1) coatings on faces of peds; few soft nodules of calcium carbonate; slight effervescence; moderately alkaline; abrupt smooth boundary.

C3—48 to 60 inches; reddish brown (2.5YR 4/4) silty clay; massive; firm; few light greenish gray (5G 7/1) coatings in pores; about 5 percent gravel; slight effervescence; moderately alkaline.

Beseman Series

The Beseman series consists of very deep, very poorly drained soils on ground moraines, outwash plains, and lake plains. These soils formed in organic material over loamy glacial sediments. Permeability is moderate or moderately rapid in the organic mantle and moderately slow in the loamy sediments. Slopes are less than 1 percent.

Typical pedon of Beseman mucky peat, about 1,350 feet north and 50 feet west of the southeast corner of sec. 17, T. 48 N., R. 42 W., Bergland Township, Ontonagon County, Michigan:

Oe—0 to 2 inches; dark reddish brown (5YR 2.5/2) (broken face) mucky peat; about 60 percent fiber, 32 percent rubbed; weak thick platy structure; friable; herbaceous fiber; many very fine to medium roots; about 5 percent gravel; extremely acid; abrupt smooth boundary.

Oi—2 to 9 inches; very dark brown (10YR 2/2) (broken face) peat; about 80 percent fiber, 64 percent rubbed; weak thick platy structure; friable; herbaceous fiber; common very fine to medium roots; about 5 percent gravel; extremely acid; clear smooth boundary.

Oa1—9 to 27 inches; black (10YR 2/1) (broken face) muck; about 16 percent fiber, 2 percent rubbed; weak thick and very thick platy structure; friable; herbaceous fiber; few very fine and fine roots; about 2 percent gravel; extremely acid; gradual smooth boundary.

Oa2—27 to 35 inches; black (10YR 2/1) (broken face and rubbed) muck; about 8 percent fiber, 2 percent rubbed; weak thick platy structure; friable; herbaceous fiber; few very fine and fine roots; about 2 percent gravel; extremely acid; gradual smooth boundary.

Oa3—35 to 44 inches; black (10YR 2/1) (broken face and rubbed) muck; about 12 percent fiber, 2 percent rubbed; weak thick platy structure; friable; herbaceous fiber; few very fine and fine roots; about 2 percent gravel; extremely acid; abrupt smooth boundary.

Ab—44 to 47 inches; very dark grayish brown (10YR 3/2) loam; massive; firm; few very fine and fine roots; very strongly acid; abrupt wavy boundary.

Eb—47 to 57 inches; reddish gray (5YR 5/2) silt loam; massive; firm; few fine roots; very strongly acid; clear wavy boundary.

Bw—57 to 67 inches; reddish brown (10YR 5/3) silt loam; massive; firm; very few fine roots; very strongly acid; gradual broken boundary.

C—67 to 80 inches; reddish brown (5YR 5/4) silt loam; massive; firm; very few fine roots; very strongly acid.

Big Iron Series

The Big Iron series consists of very deep, somewhat poorly drained soils on ground moraines. These soils formed in loamy till. Permeability is moderate in the upper part of the solum, moderately slow in the lower part of the solum, and very slow in the substratum. Slopes range from 0 to 8 percent.

Soil Survey of Gogebic County, Michigan

Typical pedon of Big Iron silt loam, 280 feet south and 110 feet east of the northwest corner of sec. 15, T. 51 N., R. 41 W., Carp Lake Township, Ontonagon County, Michigan:

- Oi—0 to 1 inch; slightly decomposed, loose hardwood leaf litter and twigs.
- A—1 to 3 inches; black (7.5YR 2.5/1) silt loam; moderate medium granular structure; friable; many very fine to coarse roots; about 1 percent gravel; very strongly acid; abrupt smooth boundary.
- E—3 to 4 inches; brown (7.5YR 5/3) silt loam; moderate fine and medium subangular blocky structure; friable; common very fine to coarse roots; about 2 percent gravel; very strongly acid; clear broken boundary.
- Bw—4 to 11 inches; brown (7.5YR 4/4) loam; moderate medium subangular blocky structure; friable; common very fine to coarse roots; few yellowish red (5YR 5/6) masses of oxidized iron; about 3 percent gravel; very strongly acid; clear wavy boundary.
- E/B—11 to 17 inches; brown (7.5YR 5/3) loam (E); occupies about 70 percent of the horizon surrounding isolated remnants of reddish brown (5YR 4/4) silt loam (B); weak thick platy structure; firm; few very fine to coarse roots; common yellowish red (5YR 5/8) masses of oxidized iron; about 6 percent gravel; very strongly acid; clear wavy boundary.
- Bt—17 to 47 inches; reddish brown (2.5YR 4/4) silt loam; weak very thick platy structure; firm; few fine and medium roots; many red (2.5YR 4/6) clay films; common yellowish red (5YR 5/6) masses of oxidized iron; few brown (7.5YR 4/2) masses of reduced iron; about 5 percent gravel; neutral; gradual wavy boundary.
- BCd1—47 to 66 inches; reddish brown (2.5YR 4/4) loam; weak coarse subangular blocky structure; firm; few red (2.5YR 4/6) clay films; about 10 percent gravel; slightly alkaline; gradual wavy boundary.
- BCd2—66 to 80 inches; reddish brown (2.5YR 4/4) gravelly silt loam; weak coarse angular blocky structure; firm; about 30 percent gravel; neutral.

Bowstring Series

The Bowstring series consists of very deep, very poorly drained soils on flood plains on ground moraines, outwash plains, and lake plains. These soils formed in highly decomposed organic material that has thin layers of sandy or loamy material. Permeability is rapid to moderately slow. Slopes are 0 to 1 percent.

Typical pedon of Bowstring muck, 760 feet south and 530 feet east of the northwest corner of sec. 32, T. 46 N., R. 46 W., Erwin Township, Gogebic County, Michigan:

- Oa—0 to 13 inches; very dark brown (10YR 2/2) (broken face) muck; about 30 percent fiber, 5 percent rubbed; massive; friable; herbaceous fiber; moderately acid; abrupt smooth boundary.
- C—13 to 15 inches; dark gray (10YR 4/3), stratified mucky silt loam and muck; massive; friable; slightly acid; abrupt smooth boundary.
- O'a—15 to 32 inches; very dark brown (10YR 2/2) (broken face and rubbed) muck; about 10 percent fiber, 1 percent rubbed; massive; friable; herbaceous fiber; moderately acid; clear smooth boundary.
- Oe—32 to 36 inches; dark brown (10YR 3/3) (broken face and rubbed) mucky peat; about 40 percent fiber, 20 percent rubbed; massive; friable; slightly acid; clear wavy boundary.
- C'1—36 to 42 inches; very dark grayish brown (10YR 3/2) fine sandy loam; massive; friable; slightly acid; clear wavy boundary.
- C'2—42 to 80 inches; dark grayish brown (10YR 4/2), stratified gravelly coarse sand and sand; single grain; loose; about 20 percent gravel; slightly acid.

Cathro Series

The Cathro series consists of very deep, very poorly drained soils in depressions and drainageways on ground moraines, outwash plains, lake plains, stream terraces, and flood plains. These soils formed in organic deposits over loamy deposits. Permeability is moderately slow to moderately rapid in the organic part of the profile and moderate or moderately slow in the loamy part. Slopes are 0 to 1 percent.

Typical pedon of Cathro muck, 1,270 feet south and 1,320 feet west of the northeast corner of sec. 25, T. 42 N., R. 26 W., Wells Township, Marquette County, Michigan:

- Oa1—0 to 6 inches; muck, black (N 2.5/) broken face and black (5YR 2.5/1) rubbed; weak thick platy structure; many very fine to medium roots; about 50 percent fiber, 15 percent rubbed; neutral; abrupt smooth boundary.
- Oa2—6 to 18 inches; muck, black (10YR 2/1) broken face and black (5YR 2.5/1) rubbed; moderate very thick platy structure; few fine roots; about 40 percent fiber, 10 percent rubbed; slightly acid; abrupt smooth boundary.
- Oa3—18 to 31 inches; muck, black (5YR 2.5/1) broken face and rubbed; massive; about 20 percent fiber, 5 percent rubbed; slightly acid; abrupt smooth boundary.
- Cg—31 to 80 inches; dark grayish brown (10YR 4/2) fine sandy loam; massive; about 9 percent gravel and 5 percent cobbles; slightly effervescent; slightly alkaline.

Chabeneau Series

The Chabeneau series consists of very deep, moderately well drained soils on outwash plains, eskers, and stream terraces. These soils formed in modified loamy eolian deposits over sandy and gravelly glacial outwash. Permeability is moderate in the upper part and very rapid in the lower part. Slopes range from 0 to 6 percent.

Typical pedon of Chabeneau very fine sandy loam, about 200 feet south and 730 feet east of the northwest corner of sec. 31, T. 47 N., R. 29 W.; USGS Republic topographic quadrangle; lat. 46 degrees 26 minutes 04 seconds N. and long. 87 degrees 59 minutes 18 seconds W., Marquette County, Michigan:

- Oe—0 to 1 inch; partially decomposed, mixed deciduous and coniferous forest litter.
- A—1 to 2 inches; very dark grayish brown (10YR 3/2) very fine sandy loam, grayish brown (10YR 5/2) dry; weak fine granular structure; friable; many fine to coarse roots; about 3 percent gravel; extremely acid; abrupt wavy boundary.
- E—2 to 5 inches; reddish gray (5YR 5/2) silt loam, light gray (5YR 7/1) dry; weak fine subangular blocky structure; friable; many fine to coarse roots; about 3 percent gravel; extremely acid; abrupt irregular boundary.
- Bs1—5 to 10 inches; dark reddish brown (5YR 3/4) silt loam; weak fine subangular blocky structure; friable; many fine to coarse roots; about 8 percent gravel; strongly acid; clear wavy boundary.
- Bs2—10 to 22 inches; brown (7.5YR 4/4) silt loam; weak fine subangular blocky structure; friable; common fine and medium roots; about 8 percent gravel; strongly acid; gradual wavy boundary.
- 2BC—22 to 30 inches; brown (7.5YR 4/4) gravelly loamy coarse sand; weak medium subangular blocky structure; very friable; common fine roots; about 25 percent gravel; strongly acid; clear wavy boundary.
- 2C1—30 to 48 inches; brown (10YR 5/3), stratified coarse sand and very gravelly coarse sand; single grain; loose; few fine roots; about 40 percent gravel and 10 percent cobbles; common coarse prominent strong brown (7.5YR 5/8) masses of iron accumulation beginning at a depth of 33 inches; strongly acid; diffuse wavy boundary.

2C2—48 to 121 inches; brown (10YR 5/3), stratified sand and gravelly sand; single grain; loose; few fine roots in the upper 12 inches of the horizon; common coarse prominent strong brown (7.5YR 5/8) iron accumulations; about 24 percent gravel and 5 percent cobbles; strongly acid.

Channing Series

The Channing series consists of very deep, somewhat poorly drained soils on outwash plains, stream terraces, and moraines. These soils formed in loamy deposits and in the underlying sand and gravel. Permeability is moderate in the solum and very rapid in the substratum. Slopes range from 0 to 3 percent.

Typical pedon of Channing fine sandy loam, stony, about one-half mile south of the village of Three Lakes; 1,600 feet north and 400 feet east of the southwest corner of sec. 20, T. 48 N., R. 31 W., Baraga County, Michigan:

Oi—0 to 2 inches; recent hardwood litter.

A—2 to 4 inches; dark reddish brown (5YR 3/2) fine sandy loam, pinkish gray (5YR 6/2) dry; moderate medium granular structure; friable; many roots; about 5 percent gravel; very strongly acid; abrupt smooth boundary.

E—4 to 5 inches; reddish brown (5YR 5/3) fine sandy loam; weak fine subangular blocky structure; friable; many roots; about 5 percent gravel; very strongly acid; abrupt broken boundary.

Bs1—5 to 14 inches; reddish brown (5YR 4/4) very fine sandy loam; moderate medium subangular blocky structure; friable; many roots; about 5 percent gravel; few fine faint yellowish red (5YR 5/8) masses of iron accumulation; strongly acid; clear wavy boundary.

Bs2—14 to 22 inches; dark yellowish brown (10YR 4/6) fine sandy loam; weak fine subangular blocky structure; friable; common roots; about 5 percent gravel; strongly acid; clear wavy boundary.

2C1—22 to 27 inches; dark brown (7.5YR 4/4) gravelly sand; single grain; loose; few roots; about 30 percent gravel; strongly acid; clear wavy boundary.

2C2—27 to 80 inches; dark yellowish brown (10YR 4/6) gravelly sand; single grain; loose; about 20 percent gravel; moderately acid.

Croswell Series

The Croswell series consists of very deep, moderately well drained soils on beach ridges, outwash plains, and outwash terraces. These soils formed in sandy glacial drift. Permeability is rapid. Slopes range from 0 to 12 percent.

Typical pedon of Croswell sand, 600 feet north and 1,650 feet west of the southeast corner of sec. 23, T. 45 N., R. 29 W., Humbolt Township, Marquette County, Michigan:

A—0 to 3 inches; very dark brown (10YR 2/2) sand; weak very fine granular structure; very friable; many very fine to coarse roots; about 2 percent gravel; strongly acid; abrupt smooth boundary.

E—3 to 7 inches; pinkish gray (5YR 6/2) sand; weak fine granular structure; very friable; many very fine to coarse roots; about 2 percent gravel; strongly acid; abrupt smooth boundary.

Bs1—7 to 14 inches; reddish brown (5YR 4/4) sand; weak fine subangular blocky structure; very friable; many very fine to coarse roots; about 2 percent gravel; strongly acid; clear wavy boundary.

- Bs2—14 to 22 inches; yellowish red (5YR 4/6) sand; weak fine subangular blocky structure; very friable; few very fine to medium roots; tongues of dark reddish brown (5YR 3/4) moderately cemented ortstein occupy 13 percent of the horizon; about 2 percent gravel; moderately acid; gradual wavy boundary.
- Bs3—22 to 34 inches; strong brown (7.5YR 5/6) sand; single grain; loose; few very fine to medium roots; tongues of reddish brown (5YR 4/4) moderately cemented ortstein occupy 15 percent of the horizon; common fine distinct strong brown (7.5YR 5/8) masses of oxidized iron; about 2 percent gravel; moderately acid; gradual wavy boundary.
- C—34 to 80 inches; light brown (7.5YR 6/4) sand; single grain; loose; few very fine and fine roots; common fine distinct strong brown (7.5YR 5/8) masses of oxidized iron; about 2 percent gravel; moderately acid.

Cuttre Series

The Cuttre series consists of very deep, somewhat poorly drained soils on ground moraines. These soils formed in clayey till. Permeability is extremely slow or very slow. Slopes range from 0 to 3 percent.

Typical pedon of Cuttre clay, 50 feet south and 920 feet west of the northeast corner of sec. 30, T. 48 N., R. 11 W., Amnicon Township, Douglas County, Wisconsin:

- A—0 to 3 inches; dark reddish brown (5YR 2.5/2) clay; weak medium granular structure; friable; many fine to coarse roots; about 1 percent gravel; strongly acid; abrupt smooth boundary.
- E/B—3 to 6 inches; 70 percent brown (7.5YR 5/2) clay loam (E); extends as tongues into and surrounds remnants of reddish brown (5YR 5/3) clay (Bt); weak medium subangular blocky structure; friable; many brown (7.5YR 5/4) and strong brown (7.5YR 4/6) masses of oxidized iron; many fine to coarse roots; about 1 percent gravel; strongly acid; clear wavy boundary.
- B/E—6 to 12 inches; 70 percent reddish brown (2.5YR 4/4) clay (Bt); penetrated by tongues of brown (7.5YR 5/2) clay loam (E); moderate medium angular blocky structure; firm; common reddish brown (5YR 5/3) clay films on faces of peds; common fine and medium roots; common yellowish red (5YR 5/6) masses of oxidized iron; about 1 percent gravel; moderately acid; clear wavy boundary.
- Bt—12 to 25 inches; dark reddish brown (2.5YR 3/4) clay; moderate fine angular blocky structure; firm; common fine and medium roots; common reddish brown (2.5YR 4/4) clay films on faces of peds; few reddish brown (2.5YR 5/4) masses of oxidized iron; about 1 percent gravel; slightly alkaline; clear wavy boundary.
- Btk1—25 to 31 inches; dark reddish brown (2.5YR 3/4) clay; moderate fine angular blocky structure; firm; few fine and medium roots; common reddish brown (2.5YR 4/4) clay films on faces of peds; common fine and medium light reddish brown (2.5YR 6/4) soft masses of calcium carbonate; about 1 percent gravel; strongly effervescent; moderately alkaline; clear wavy boundary.
- Btk2—31 to 41 inches; reddish brown (2.5YR 4/4) clay; weak coarse angular blocky structure; firm; few fine roots; few dark reddish brown (2.5YR 3/4) clay films on faces of peds; common medium and coarse light reddish brown (2.5YR 6/4) soft masses of calcium carbonate; about 2 percent gravel; violently effervescent; moderately alkaline; gradual wavy boundary.
- BC—41 to 80 inches; reddish brown (2.5YR 4/4) clay; weak coarse prismatic structure; firm; few fine roots; common light reddish brown (2.5YR 6/4) soft masses of calcium carbonate; about 2 percent gravel; violently effervescent; moderately alkaline.

Dawson Series

The Dawson series consists of very deep, very poorly drained soils in depressions on outwash plains, lake plains, and ground moraines. These soils formed in organic deposits overlying sandy deposits. Permeability is moderately rapid to moderately slow in the organic part of the profile and rapid in the sandy part. Slopes are 0 to 1 percent.

Typical pedon of Dawson peat, 1,100 feet south and 100 feet west of the northeast corner of sec. 20, T. 55 N., R. 31 W., Franklin Township, Houghton County, Michigan:

- Oi—0 to 6 inches; peat, dark brown (10YR 3/3) broken face and dark brown (10YR 4/3) rubbed; about 90 percent fiber, 80 percent rubbed; massive; primarily sphagnum moss fibers; extremely acid; abrupt smooth boundary.
- Oe—6 to 10 inches; mucky peat, black (10YR 2/1) broken face and rubbed; about 80 percent fiber, 30 percent rubbed; massive; primarily herbaceous fibers; extremely acid; abrupt smooth boundary.
- Oa1—10 to 18 inches; muck, very dark brown (10YR 2/2) broken face and rubbed; about 15 percent fibers, 5 percent rubbed; massive; primarily herbaceous fibers; extremely acid; clear wavy boundary.
- Oa2—18 to 30 inches; muck, black (10YR 2/1) broken face and rubbed; about 15 percent fibers, 5 percent rubbed; massive; primarily herbaceous fibers; extremely acid; abrupt smooth boundary.
- A—30 to 34 inches; very dark grayish brown (10YR 3/2) sand; massive; very friable; very strongly acid; clear wavy boundary.
- C—34 to 80 inches; brown (10YR 4/3) sand; single grain; loose; very strongly acid.

Dishno Series

The Dishno series consists of moderately well drained soils on bedrock-controlled moraines. These soils are deep to bedrock. They formed in silty and loamy deposits over sandy and gravelly till underlain by igneous or metamorphic bedrock. Permeability is moderate in the loamy material and moderately rapid in the sandy material. Slopes range from 0 to 35 percent.

Typical pedon of Dishno cobbly silt loam, 583 feet north and 1,832 feet east of the southwest corner of sec. 33, T. 49 N., R. 29 W., Michigamme Township, Marquette County, Michigan:

- Oe—0 to 1 inch; dark reddish brown (5YR 2.5/2), partially decomposed forest litter; many very fine to coarse roots; very strongly acid; abrupt smooth boundary.
- A—1 to 3 inches; dark reddish brown (5YR 3/2) cobbly silt loam; moderate very fine granular structure; friable; many very fine to coarse roots; about 10 percent cobbles, 9 percent gravel, 5 percent stones, and 1 percent boulders; extremely acid; clear wavy boundary.
- E—3 to 9 inches; reddish gray (5YR 5/2) cobbly silt loam; weak medium platy structure parting to weak very fine subangular blocky; friable; many very fine to coarse roots; about 10 percent cobbles, 9 percent gravel, 5 percent stones, and 1 percent boulders; extremely acid; abrupt wavy boundary.
- Bhs—9 to 10 inches; dark brown (7.5YR 3/2) cobbly loam; weak fine subangular blocky structure; friable; many very fine to coarse roots; about 10 percent cobbles, 7 percent gravel, 5 percent stones, and 1 percent boulders; very strongly acid; abrupt broken boundary.
- Bs1—10 to 18 inches; dark brown (7.5YR 3/4) cobbly fine sandy loam; weak fine subangular blocky structure; friable; many very fine to coarse roots; about 10 percent cobbles, 7 percent gravel, 5 percent stones, and 1 percent boulders; very strongly acid; clear wavy boundary.

- Bs2—18 to 22 inches; brown (7.5YR 4/4) cobbly loamy sand; weak medium platy structure; firm; common very fine to coarse roots; about 10 percent cobbles, 7 percent gravel, 5 percent stones, and 1 percent boulders; strongly acid; abrupt broken boundary.
- 2BC—22 to 29 inches; brown (10YR 4/3) very stony loamy sand; massive; weak thick platiness inherent from deposition; dominantly friable but firm in places; few very fine to medium roots; common strong brown (7.5YR 4/6) masses of oxidized iron; about 13 percent gravel, 10 percent cobbles, 10 percent stones, and 5 percent boulders; strongly acid; gradual wavy boundary.
- 2C—29 to 46 inches; light olive brown (2.5Y 5/3) very stony loamy sand; massive; weakly expressed thick platiness inherent from deposition; dominantly friable but firm in places; few very fine to medium roots; few strong brown (7.5YR 4/6) masses of oxidized iron; about 13 percent gravel, 10 percent cobbles, 10 percent stones, and 5 percent boulders; moderately acid; abrupt smooth boundary.
- 3R—46 inches; brown (10YR 4/3), unweathered bedrock; discontinuous brown (10YR 4/3) loamy coarse sand saprolite layer $\frac{1}{8}$ inch thick on surface of bedrock; many strong brown (7.5YR 5/8) masses of oxidized iron on surface of bedrock; strongly acid.

Dorval Series

The Dorval series consists of very deep, very poorly drained organic soils in depressions on ground moraines and lake plains. These soils formed in well decomposed organic material underlain by clayey deposits. Slopes range from 0 to 2 percent.

Typical pedon of Dorval muck, 1,670 feet south and 1,900 feet east of the northwest corner of sec. 12, T. 46 N., R. 40 W., Haight Township, Ontonagon County, Michigan:

- Oa1—0 to 4 inches; black (5YR 2.5/1) muck; moderate medium granular structure; friable; many very fine to coarse roots; about 30 percent fibers, 10 percent rubbed; woody fibers; extremely acid; abrupt smooth boundary.
- Oa2—4 to 14 inches; black (N 2/) muck; massive; friable; common very fine to medium roots; about 40 percent fibers, 12 percent rubbed; woody fibers; strongly acid; clear smooth boundary.
- Oa3—14 to 32 inches; black (N 2/) muck; massive; friable; about 50 percent fibers, 15 percent rubbed; woody fibers; about 3 percent woody fragments; strongly acid; abrupt wavy boundary.
- C1—32 to 44 inches; reddish brown (5YR 4/4) silty clay loam; massive; firm; few reddish gray (2.5YR 5/1) masses of reduced iron; strongly acid; clear smooth boundary.
- C2—44 to 50 inches; reddish brown (5YR 4/4), stratified silty clay loam and silt loam; massive; friable; common yellowish red (5YR 5/8) masses of oxidized iron; strongly acid; clear smooth boundary.
- C3—50 to 60 inches; reddish brown (5YR 4/3) gravelly sandy loam; massive; friable; about 30 percent gravel; moderately acid.

Evart Series

The Evart series consists of very deep, poorly drained and very poorly drained soils on flood plains. These soils formed in sandy alluvium. Permeability is rapid. Slopes range from 0 to 2 percent.

Typical pedon of Evart loam, 550 feet south and 960 feet west of the northeast corner of sec. 12, T. 44 N., R. 37 W., Stambaugh Township, Iron County, Michigan:

- Oi—0 to 1 inch; slightly decomposed herbaceous material.
- Oa—1 to 2 inches; well decomposed herbaceous material.
- A—2 to 9 inches; very dark gray (10YR 3/1) loam; moderate medium and fine subangular blocky structure; friable; common very fine to coarse roots; common dark grayish brown (10YR 4/2) masses of reduced iron; about 4 percent cobbles and 4 percent gravel; strongly acid; clear smooth boundary.
- Eg—9 to 20 inches; gray (5Y 5/1), stratified sandy loam and loam; moderate medium and coarse subangular blocky structure; friable; common very fine to medium roots; common yellowish brown (10YR 5/6) masses of oxidized iron; about 8 percent gravel and 5 percent cobbles; strongly acid; clear smooth boundary.
- Cg1—20 to 34 inches; dark brown (10YR 3/2) very gravelly loamy sand; single grain; loose; few fine roots; common strong brown (7.5YR 5/6) masses of oxidized iron; about 30 percent gravel and 10 percent cobbles; strongly acid; gradual smooth boundary.
- Cg2—34 to 80 inches; dark grayish brown (10YR 4/2) very gravelly coarse sand; single grain; loose; very few fine roots; about 30 percent gravel and 10 percent cobbles; strongly acid.

Fence Series

The Fence series consists of very deep, moderately well drained soils on glacial lake plains. These soils formed in mostly silty stratified lacustrine deposits. Permeability is moderate in the solum and moderately slow in the substratum. Slopes range from 0 to 18 percent.

Typical pedon of Fence silt loam, 500 feet south and 1,150 feet west of the northeast corner of sec. 26, T. 46 N., R. 24 W., West Branch Township, Marquette County, Michigan:

- A—0 to 6 inches; dark reddish brown (5YR 3/2) silt loam; moderate medium granular structure; friable; many very fine to coarse roots; strongly acid; abrupt wavy boundary.
- E—6 to 7 inches; light reddish brown (5YR 6/3) silt loam; moderate fine subangular blocky structure; friable; many very fine to coarse roots; strongly acid; abrupt broken boundary.
- Bs—7 to 13 inches; dark reddish brown (5YR 3/4) silt loam; moderate fine subangular blocky structure; friable; many very fine to coarse roots; strongly acid; clear wavy boundary.
- E'—13 to 15 inches; brown (7.5YR 5/3) silt loam; moderate fine subangular blocky structure; friable; common very fine to coarse roots; common yellowish red (5YR 5/6) masses of oxidized iron; neutral; abrupt wavy boundary.
- B/E1—15 to 20 inches; reddish brown (2.5YR 4/4) silt loam (Bt); very few reddish brown (5YR 4/4) clay films on surfaces along root channels; occupies about 80 percent of the horizon penetrated by tongues of light reddish brown (5YR 6/3) silt loam (E); moderate medium subangular blocky structure; firm; common very fine to medium roots; common yellowish red (5YR 5/6) masses of oxidized iron; neutral; abrupt wavy boundary.
- B/E2—20 to 35 inches; reddish brown (2.5YR 4/4) silt loam (Bt); very few reddish brown (5YR 4/4) clay films on surfaces along root channels; occupies about 70 percent of the horizon penetrated by tongues of reddish brown (5YR 5/3) silt (E); moderate coarse prismatic structure parting to moderate coarse subangular blocky; firm; few very fine to coarse roots; about 1 percent gravel; slightly alkaline; gradual smooth boundary.

C—35 to 80 inches; stratified reddish brown (2.5YR 4/4) silt loam and reddish brown (5YR 4/3) silt; weak very thick platy structure; firm; very few very fine to coarse roots; about 1 percent gravel; moderately alkaline.

Flintsteel Series

The Flintsteel series consists of very deep, moderately well drained soils on ground moraines. These soils formed in loamy till. Permeability is moderate in the upper part of the solum, moderately slow in the lower part of the solum, and very slow in the substratum. Slopes range from 1 to 35 percent.

Typical pedon of Flintsteel silt loam, 1,650 feet south and 2,200 feet east of the northwest corner of sec. 8, T. 50 N., R. 40 W., Ontonagon Township, Ontonagon County, Michigan:

- Oi—0 to 1 inch; slightly decomposed leaves and twigs; very strongly acid.
- A—1 to 5 inches; black (5YR 2.5/1) silt loam; weak fine granular structure; very friable; many very fine to coarse roots; about 3 percent gravel; very strongly acid; abrupt smooth boundary.
- E—5 to 9 inches; reddish gray (5YR 5/2) loam; weak fine subangular blocky structure; friable; many very fine to coarse roots; about 2 percent gravel; very strongly acid; clear wavy boundary.
- Bw—9 to 12 inches; brown (7.5YR 4/4) fine sandy loam; moderate medium subangular blocky structure; friable; common very fine to medium roots; common strong brown (7.5YR 5/8 and 5/6) masses of oxidized iron; about 6 percent gravel; very strongly acid (pH 4.9); clear wavy boundary.
- E/B—12 to 16 inches; 60 percent light brown (7.5YR 6/3) and 40 percent reddish brown (5YR 5/4) loam; weak medium prismatic structure parting to moderate medium subangular blocky; firm; common very fine to medium roots; common strong brown (7.5YR 5/6) masses of oxidized iron; about 3 percent gravel; very strongly acid; clear wavy boundary.
- B/E—16 to 22 inches; 75 percent reddish brown (5YR 5/4) and 25 percent light brown (7.5YR 6/3) loam; moderate medium prismatic structure parting to weak thick platy; firm; common fine roots; few reddish brown (5YR 4/4) clay films on faces of peds; common yellowish red (5YR 5/6) masses of oxidized iron; about 9 percent gravel; slightly acid; clear wavy boundary.
- Bt—22 to 36 inches; reddish brown (2.5YR 4/4) silt loam; moderate coarse prismatic structure parting to weak thick platy; firm; common fine roots; common reddish brown (5YR 4/4) clay films on faces of peds; about 10 percent gravel; slightly alkaline; gradual wavy boundary.
- BCd—36 to 48 inches; reddish brown (2.5YR 4/4) silt loam; moderate very coarse prismatic structure parting to moderate thick platy; firm; few fine roots; common reddish brown (2.5YR 4/4) clay films on faces of peds; about 10 percent gravel; moderately alkaline; gradual wavy boundary.
- Cd—48 to 80 inches; reddish brown (2.5YR 4/4) silt loam; moderate very coarse prismatic structure parting to moderate very thick platy; firm; few fine roots; about 3 percent gravel; moderately alkaline.

Foxpaw Series

The Foxpaw series consists of very deep, poorly drained soils in depressions and drainageways on ground moraines and end moraines. These soils formed in loamy till. Permeability is moderate. Slopes range from 0 to 2 percent.

Soil Survey of Gogebic County, Michigan

Typical pedon of Foxpaw cobbly loam, 2,000 feet south and 960 feet west of the northeast corner of sec. 7, T. 46 N., R. 44 W., Marenisco Township, Gogebic County, Michigan:

- Oi—0 to 1 inch; undecomposed hardwood and conifer litter; abrupt wavy boundary.
- Oa—1 to 3 inches; decomposed woody fibers; many fine and common medium roots; abrupt wavy boundary.
- E—3 to 8 inches; brown (7.5YR 5/2) cobbly loam; weak coarse subangular blocky structure; friable; few fine and medium roots; about 12 percent cobbles and 3 percent gravel; extremely acid; abrupt wavy boundary.
- Bhs—8 to 15 inches; dark brown (7.5YR 3/3) cobbly fine sandy loam; weak medium subangular blocky structure; friable; few fine and medium roots; about 12 percent cobbles and 3 percent gravel; few brown (7.5YR 4/3) masses of reduced iron; very strongly acid; clear wavy boundary.
- Bs—15 to 23 inches; dark brown (7.5YR 3/4) gravelly fine sandy loam; weak medium subangular blocky structure; friable; few fine roots; about 14 percent gravel and 1 percent cobbles; few brown (7.5YR 4/3) masses of reduced iron; common (7.5YR 4/6) masses of oxidized iron; very strongly acid; clear wavy boundary.
- BC—23 to 32 inches; brown (7.5YR 4/3) sandy loam; massive; friable; about 10 percent gravel and 2 percent cobbles; few brown (7.5YR 4/2) masses of reduced iron; common strong brown (7.5YR 4/6) masses of oxidized iron; strongly acid; diffuse wavy boundary.
- C—32 to 80 inches; brown (7.5YR 4/3) fine sandy loam; weak coarse subangular blocky structure; friable; about 10 percent gravel and 4 percent cobbles; few strong brown (7.5YR 4/4) masses of oxidized iron; strongly acid.

Froberg Series

The Froberg series consists of very deep, moderately well drained soils on ground moraines. These soils formed in clayey material overlying loamy material. Permeability is very slow in the clayey material and moderate or moderately slow in the loamy material. Slopes range from 1 to 18 percent.

Typical pedon of Froberg clay, 1,349 feet south and 247 feet west of the northeast corner of sec. 4, T. 48 N., R. 39 W., Stannard Township, Ontonagon County, Michigan:

- Ap—0 to 4 inches; dark brown (7.5YR 3/3) clay; moderate fine and medium granular structure; firm; many very fine to coarse roots; moderately acid; abrupt smooth boundary.
- B/E—4 to 8 inches; reddish brown (5YR 4/4) clay; weak coarse angular blocky structure parting to moderate fine and medium angular blocky; very firm; many very fine to coarse roots; many reddish brown (5YR 4/4) clay films and many prominent brown (7.5YR 4/3) organoargillans on all faces of peds; moderately acid; clear wavy boundary.
- Bt—8 to 22 inches; reddish brown (5YR 4/4) clay; weak coarse prismatic structure parting to moderate fine and medium subangular blocky; very firm; many fine to coarse roots; few reddish brown (5YR 4/4) clay films; neutral; gradual wavy boundary.
- BC1—22 to 32 inches; reddish brown (5YR 4/4) clay; weak very coarse subangular blocky structure parting to moderate fine and medium subangular blocky; firm; many fine to coarse roots; many reddish brown (5YR 4/4) clay films; about 3 percent cobbles and 10 percent gravel; slight effervescence; moderately alkaline; clear wavy boundary.
- 2BC2—32 to 45 inches; reddish brown (5YR 4/4) gravelly sandy clay loam; weak coarse subangular blocky structure; friable; few fine to coarse roots; common

reddish brown (5YR 4/4) clay films; few strong brown (7.5YR 5/6) masses of oxidized iron; about 5 percent cobbles and 10 percent gravel; very slight effervescence; moderately alkaline; gradual wavy boundary.

2BC3—45 to 80 inches; reddish brown (5YR 4/4) sandy clay loam and pockets of gravelly loamy fine sand, loam, and clay loam; weak coarse subangular blocky structure; friable; few fine and medium roots; few reddish brown (5YR 4/4) clay films; few dark red (2.5YR 3/6) masses of oxidized iron; about 5 percent gravel; very slight effervescence; moderately alkaline.

Gay Series

The Gay series consists of very deep, poorly drained and very poorly drained soils on till plains. These soils formed in loamy till. Permeability is moderate. Slopes range from 0 to 2 percent.

Typical pedon of Gay muck, 280 feet west and 1,200 feet north of the southeast corner of sec. 20, T. 51 N., R. 32 W., L'Anse Township, Baraga County, Michigan:

Oa—0 to 4 inches; very dark gray (10YR 3/1) muck; moderate medium granular structure; friable; many roots; strongly acid; abrupt smooth boundary.

A—4 to 7 inches; dark gray (10YR 4/1) fine sandy loam; weak fine subangular blocky structure; friable; many roots; strongly acid; clear smooth boundary.

Eg—7 to 11 inches; light brownish gray (10YR 6/2) sandy loam; few yellowish brown (10YR 5/6) masses of oxidized iron; weak medium subangular blocky structure; friable; common roots; about 2 percent gravel; moderately acid; clear wavy boundary.

Bw—11 to 16 inches; brown (7.5YR 5/4) sandy loam; many grayish brown (10YR 5/2) iron depletions; common yellowish brown (10YR 5/6) masses of oxidized iron; weak thick platy structure parting to weak fine subangular blocky; friable; common roots; about 4 percent gravel; moderately acid; clear wavy boundary.

BC—16 to 30 inches; reddish brown (2.5YR 4/4) sandy loam; many strong brown (7.5YR 5/6) and common reddish brown (5YR 5/3) masses of oxidized iron; massive; friable; few roots; about 4 percent gravel; slightly acid; clear wavy boundary.

C—30 to 80 inches; reddish brown (2.5YR 4/4) sandy loam; massive; friable; about 5 percent gravel; slightly acid.

Gogebic Series

The Gogebic series consists of very deep, moderately well drained soils on till plains and end moraines. These soils are shallow or moderately deep to a fragipan. They formed in silty and loamy deposits and in the underlying loamy and sandy till. Permeability is moderate in the upper part, very slow in the fragipan, and moderate to rapid in the rest of the profile. Slopes range from 1 to 35 percent.

Typical pedon of Gogebic fine sandy loam, 720 feet south and 1,615 feet west of the northeast corner of sec. 5, T. 48 N., R. 47 W., Ironwood Township, Gogebic County, Michigan:

Oi—0 to 1 inch; slightly decomposed plant material; abrupt wavy boundary; strongly acid.

A—1 to 5 inches; dark reddish brown (5YR 2.5/2) fine sandy loam; strong medium granular structure; friable; common very fine to coarse roots; about 8 percent gravel and 3 percent cobbles; strongly acid; clear wavy boundary.

- E—5 to 8 inches; dark reddish gray (5YR 4/2) fine sandy loam; moderate medium subangular blocky structure; friable; common very fine to coarse roots; about 8 percent gravel and 3 percent cobbles; strongly acid; clear irregular boundary.
- Bhs—8 to 12 inches; dark reddish brown (5YR 3/2) fine sandy loam; moderate medium subangular blocky structure; friable; common very fine to coarse roots; about 8 percent gravel and 3 percent cobbles; very strongly acid; clear wavy boundary.
- Bs—12 to 20 inches; dark reddish brown (5YR 3/4) fine sandy loam; moderate medium subangular blocky structure; friable; common fine and medium roots; about 8 percent gravel and 2 percent cobbles; very strongly acid; abrupt wavy boundary.
- 2E/Bx—20 to 33 inches; reddish brown (5YR 5/3) gravelly loamy fine sand (E); occupies about 60 percent of the horizon surrounding isolated remnants of reddish brown (5YR 4/4) gravelly fine sandy loam (Bt); moderate thick platy structure parting to moderate medium subangular blocky; very firm; few dark reddish brown (5YR 3/3) clay films; few strong brown (7.5YR 5/6 and 4/6) masses of oxidized iron; about 15 percent gravel and 2 percent cobbles; very strongly acid; clear wavy boundary.
- 2B/Ex—33 to 49 inches; reddish brown (5YR 4/4) fine sandy loam (Bt); occupies about 80 percent of the horizon surrounding isolated remnants of reddish brown (5YR 5/3) loamy fine sand (E); moderate very thick platy structure parting to moderate medium angular blocky; firm; few reddish brown (5YR 4/4) clay films; common strong brown (7.5YR 4/6) masses of oxidized iron; about 10 percent gravel and 2 percent cobbles; very strongly acid; clear smooth boundary.
- 2Bt—49 to 54 inches; dark reddish brown (5YR 3/3) fine sandy loam; moderate medium subangular blocky structure; friable; common dark reddish brown (5YR 3/3) clay films; about 10 percent gravel and 2 percent cobbles; very strongly acid; clear wavy boundary.
- 2BC—54 to 68 inches; dark reddish brown (5YR 3/3) fine sandy loam; weak thick platy structure; friable; few dark reddish brown (5YR 3/3) clay films; about 10 percent gravel and 3 percent cobbles; very strongly acid; clear wavy boundary.
- 2C—68 to 80 inches; reddish brown (5YR 4/4) gravelly fine sandy loam; massive; friable; about 12 percent gravel and 5 percent cobbles; very strongly acid.

Greenwood Series

The Greenwood series consists of very deep, very poorly drained soils in depressions on outwash plains, till-floored lake plains, and moraines. These soils formed in organic deposits more than 51 inches thick. Permeability is moderate or moderately rapid. Slopes range from 0 to 2 percent.

Typical pedon of Greenwood peat, 1,880 feet north and 1,960 feet east of the southwest corner of sec. 8, T. 44 N., R. 40 W., Watersmeet Township, Gogebic County, Michigan:

- Oi—0 to 8 inches; peat, dark reddish brown (2.5YR 3/4) broken face and reddish brown (5YR 5/4) rubbed; about 90 percent fiber, 80 percent rubbed; massive; primarily sphagnum moss fibers; extremely acid; gradual wavy boundary.
- Oe1—8 to 16 inches; mucky peat, reddish brown (5YR 4/4) broken face and dark reddish brown (5YR 3/3) rubbed; about 75 percent fiber, 50 percent rubbed; massive; primarily sphagnum moss fibers; extremely acid; clear wavy boundary.
- Oe2—16 to 34 inches; mucky peat, dusky red (2.5YR 3/2) broken face and dark reddish brown (5YR 3/2) rubbed; about 50 percent fiber, 20 percent rubbed; massive; primarily herbaceous fibers; extremely acid; gradual wavy boundary.

- Oe3—34 to 44 inches; mucky peat, dark reddish brown (5YR 3/2) broken face and dark reddish brown (2.5YR 2.5/4) rubbed; about 70 percent fiber, 35 percent rubbed; massive; primarily herbaceous fibers; extremely acid; clear wavy boundary.
- Oe4—44 to 80 inches; mucky peat, dark reddish brown (5YR 2.5/2) broken face and dark reddish brown (5YR 3/3) rubbed; about 75 percent fiber, 40 percent rubbed; massive; primarily herbaceous fibers; extremely acid.

Gull Point Series

The Gull Point series consists of very deep, poorly drained soils in drainageways and fluted depressions. These soils formed in loamy alluvium over loamy till. Permeability is moderate in the upper part of the solum, slow in the lower part of the solum, and very slow in the substratum. Slopes range from 0 to 2 percent.

Typical pedon of Gull Point loam, 325 feet south and 465 feet east of the northwest corner of sec. 13, T. 50 N., R. 42 W., Carp Lake Township, Ontonagon County, Michigan:

- Oi—0 to 1 inch; undecomposed leaf litter.
- A1—1 to 7 inches; very dark brown (7.5YR 2.5/2) loam; moderate medium granular structure; friable; many very fine to coarse roots; about 1 percent gravel and 1 percent cobbles; moderately acid; clear wavy boundary.
- A2—7 to 15 inches; dark brown (7.5YR 3/2) loam; strong coarse granular structure; friable; common very fine to coarse roots; about 1 percent gravel and 1 percent cobbles; moderately acid; clear wavy boundary.
- AB1—15 to 28 inches; dark brown (7.5YR 3/3) loam; weak fine prismatic structure parting to strong medium subangular blocky; firm; common very fine to coarse roots; many dark brown (7.5YR 3/2) clay films; about 1 percent gravel and 1 percent cobbles; moderately acid; clear wavy boundary.
- AB2—28 to 33 inches; black (5YR 2.5/1) and very dark gray (5YR 3/1) clay loam; moderate coarse prismatic structure; extremely firm; common very fine to medium roots; many very dark gray (10YR 3/1) clay films; few yellowish red (5YR 4/6) masses of oxidized iron; about 5 percent gravel and 1 percent cobbles; slightly acid; abrupt wavy boundary.
- 2Bt—33 to 40 inches; reddish brown (2.5YR 4/4) loam; weak coarse prismatic structure; very firm; few fine and medium roots; few reddish brown (2.5YR 4/3) clay films; few yellowish red (5YR 5/8) masses of oxidized iron; few reddish gray (5YR 5/2) masses of reduced iron; about 5 percent gravel and 2 percent cobbles; slightly alkaline; gradual wavy boundary.
- 2BCd1—40 to 61 inches; reddish brown (2.5YR 4/3) silt loam; weak very coarse prismatic structure; very firm; few medium roots; few reddish brown (2.5YR 4/3) clay films; about 5 percent gravel and 3 percent cobbles; slight effervescence; moderately alkaline; diffuse smooth boundary.
- 2BCd2—61 to 80 inches; reddish brown (2.5YR 4/3) silt loam; weak coarse prismatic structure; very firm; few reddish brown (2.5YR 4/3) clay films; about 5 percent gravel and 3 percent cobbles; slight effervescence; strongly alkaline.

Islandlake Series

The Islandlake series consists of very deep, somewhat excessively drained soils on kames, moraines, stream terraces, and outwash plains. These soils formed in sandy glaciofluvial deposits. Permeability is rapid. Slopes range from 0 to 55 percent.

Soil Survey of Gogebic County, Michigan

Typical pedon of Islandlake sand, 615 feet north and 175 feet west of the southeast corner of sec. 6, T. 50 N., R. 37 W., Bohemia Township, Ontonagon County, Michigan:

- Oa—0 to 2 inches; black (7.5YR 2.5/1), highly decomposed forest litter; many very fine to very coarse roots; very strongly acid; abrupt wavy boundary.
- E—2 to 7 inches; brown (7.5YR 5/2) sand; weak medium subangular blocky structure; very friable; many very fine to very coarse roots; very strongly acid; clear irregular boundary.
- Bhs—7 to 9 inches; dark reddish brown (5YR 3/3) sand; weak medium and fine subangular blocky structure; very friable; many very fine to very coarse roots; very strongly acid; clear irregular boundary.
- Bs1—9 to 16 inches; brown (7.5YR 4/4) sand; weak medium subangular blocky structure; very friable; common very fine to coarse roots; 35 percent weakly cemented dark reddish brown (5YR 5/2) and dark brown (7.5YR 3/4) ortstein columns; very strongly acid; clear irregular boundary.
- Bs2—16 to 35 inches; strong brown (7.5YR 4/6) sand; weak medium subangular blocky structure; very friable; common very fine to coarse roots; 30 percent weakly cemented dark reddish brown (5YR 5/2) and dark brown (7.5YR 3/4) ortstein columns; strongly acid; gradual irregular boundary.
- E'—35 to 45 inches; yellowish brown (10YR 5/4) sand; weak very thick platy structure; very friable; few very fine to medium roots; strongly acid; gradual broken boundary.
- E and Bt—45 to 80 inches; yellowish brown (10YR 5/4) sand (E) and brown (7.5YR 4/4) loamy sand (Bt); weak very thick platy structure; very friable; lamellae $\frac{1}{8}$ to $\frac{1}{4}$ inch thick with total accumulation of less than 6 inches; strongly acid.

Kalkaska Series

The Kalkaska series consists of very deep, somewhat excessively drained soils on outwash plains, moraines, and outwash terraces. These soils formed in sandy deposits. Permeability is rapid. Slopes range from 0 to 55 percent.

Typical pedon of Kalkaska sand, 1,000 feet north and 250 feet east of the southwest corner of sec. 31, T. 47 N., R. 24 W., Chocolay Township, Marquette County, Michigan:

- Oa—0 to 2 inches; black (N 2.5/), well decomposed forest litter; many very fine to coarse roots; abrupt smooth boundary.
- E—2 to 6 inches; reddish gray (5YR 5/2) sand; weak fine subangular blocky structure; very friable; many very fine to coarse roots; about 2 percent gravel; extremely acid; clear wavy boundary.
- Bhs—6 to 8 inches; dark reddish brown (5YR 3/2) sand; weak fine subangular blocky structure; very friable; many very fine to coarse roots; dark reddish brown (5YR 3/2) ortstein occupies 15 percent of the horizon; about 2 percent gravel; extremely acid; clear irregular boundary.
- Bs—8 to 17 inches; reddish brown (5YR 4/4) sand; weak fine subangular blocky structure; very friable; many very fine to coarse roots; dark reddish brown (5YR 3/3) and reddish brown (5YR 4/4) ortstein occupies 38 percent of the horizon; about 2 percent gravel; very strongly acid; gradual irregular boundary.
- BC—17 to 32 inches; strong brown (7.5YR 5/6) sand; weak very fine subangular blocky structure; very friable; few very fine and fine roots; about 2 percent gravel; strongly acid; gradual irregular boundary.
- C—32 to 80 inches; brown (7.5YR 5/3) sand; single grain; loose; about 2 percent gravel; strongly acid.

Karlin Series

The Karlin series consists of very deep, somewhat excessively drained soils on outwash plains, valley trains, stream terraces, ground moraines, and end moraines. These soils formed in sandy deposits. Permeability is moderately rapid in the E and B horizons and rapid in the C horizon. Slopes range from 0 to 75 percent.

Typical pedon of Karlin loamy fine sand, 1,480 feet south and 315 feet east of the northwest corner of sec. 27, T. 46 N., R. 39 W., Haight Township, Ontonagon County, Michigan:

- Oe—0 to 1 inch; very dark brown (7.5YR 2.5/2), moderately decomposed plant material; friable; many very fine to medium roots; extremely acid; abrupt smooth boundary.
- E—1 to 7 inches; dark reddish gray (5YR 4/2) loamy fine sand; weak fine subangular blocky structure; very friable; many very fine to medium roots; 1 percent gravel; extremely acid; abrupt irregular boundary.
- Bs1—7 to 9 inches; dark reddish brown (5YR 3/4) loamy fine sand; weak fine subangular blocky structure; very friable; 1 percent gravel; very strongly acid; abrupt broken boundary.
- Bs2—9 to 19 inches; reddish brown (5YR 4/4) loamy fine sand; weak fine and medium subangular blocky structure; very friable; common very fine to medium roots; 1 percent gravel; very strongly acid; clear wavy boundary.
- Bs3—19 to 29 inches; strong brown (7.5YR 4/6) loamy fine sand; weak medium subangular blocky structure; friable; common very fine and fine roots; 1 percent gravel; very strongly acid; clear wavy boundary.
- BC—29 to 40 inches; brown (7.5YR 5/4) loamy fine sand; weak medium subangular blocky structure parting to weak thin platy; friable; few very fine roots; 1 percent gravel; strongly acid; clear wavy boundary.
- C1—40 to 75 inches; light brown (7.5YR 6/4) sand; single grain; loose; 1 percent gravel; moderately acid; few brown (7.5YR 5/4) loamy fine sand and fine sand color bands; clear smooth boundary.
- C2—75 to 90 inches; brown (7.5YR 5/3) sand; single grain; loose; few fine strong brown (7.5YR 4/6) iron concretions; moderately acid; few brown (7.5YR 5/4) loamy fine sand and fine sand color bands.

Kellogg Series

The Kellogg series consists of very deep, moderately well drained soils on outwash plains. These soils formed in sandy sediments underlain by clayey deposits. Permeability is rapid in the sandy material and slow or very slow in the clayey material. Slopes range from 0 to 12 percent.

Typical pedon of Kellogg loamy sand, 70 feet south and 2,640 feet west of the northeast corner of sec. 22, T. 47 N., R. 38 W., Interior Township, Ontonagon County, Michigan:

- A—0 to 6 inches; dark reddish brown (5YR 2.5/2) loamy sand; moderate coarse granular structure; friable; many very fine to coarse roots; about 3 percent gravel; very strongly acid; abrupt smooth boundary.
- E—6 to 9 inches; reddish brown (5YR 5/3) loamy sand; moderate medium subangular blocky structure; friable; many very fine to coarse roots; about 6 percent gravel and 2 percent cobbles; strongly acid; clear wavy boundary.
- Bs—9 to 24 inches; reddish brown (5YR 4/4) sand; weak medium subangular blocky structure; very friable; common very fine to coarse roots; about 8 percent gravel and 2 percent cobbles; strongly acid; clear wavy boundary.

- 2Bt1—24 to 31 inches; reddish brown (2.5YR 4/4) sandy loam; weak coarse subangular blocky structure; friable; few very fine to medium roots; very few reddish brown (2.5YR 4/4) clay films; few yellowish red (5YR 5/8) masses of oxidized iron; very few grayish brown (2.5Y 5/2) masses of reduced iron; about 4 percent gravel and 4 percent cobbles; strongly acid; clear wavy boundary.
- 3Bt2—31 to 37 inches; reddish brown (2.5YR 4/4) silty clay loam; weak coarse prismatic structure parting to moderate medium angular blocky; firm; very few very fine and fine roots; few reddish brown (2.5YR 4/4) clay films; about 2 percent gravel and 4 percent cobbles; moderately acid; gradual wavy boundary.
- 3BC—37 to 80 inches; reddish brown (2.5YR 4/4) silty clay loam; weak very coarse prismatic structure; very firm; few reddish brown (2.5YR 4/4) clay films; about 2 percent gravel and 2 percent cobbles; neutral.

Keweenaw Series

The Keweenaw series consists of very deep, well drained soils on ground moraines and end moraines. These soils formed in sandy deposits. Permeability is moderate or moderately rapid. Slopes range from 1 to 70 percent.

Typical pedon of Keweenaw loamy fine sand, 1,484 feet south and 2,064 feet west of the northeast corner of sec. 29, T. 57 N., R. 31 W., Sherman Township, Keweenaw County, Michigan:

- Oa—0 to 2 inches; black (7.5YR 2.5/1), well decomposed forest litter; weak medium granular structure; very friable; many very fine to very coarse roots; extremely acid; abrupt smooth boundary.
- E—2 to 4 inches; dark reddish gray (5YR 4/2) loamy fine sand; weak fine subangular blocky structure; very friable; many very fine to coarse roots; about 8 percent gravel, 3 percent cobbles, and 2 percent stones; very strongly acid; clear wavy boundary.
- Bhs—4 to 6 inches; dark reddish brown (5YR 3/2) loamy fine sand; moderate fine subangular blocky structure; friable; about 2 percent weakly cemented ortstein fragments; many very fine to coarse roots; about 8 percent gravel, 3 percent cobbles, and 2 percent stones; very strongly acid; clear broken boundary.
- Bs1—6 to 17 inches; dark reddish brown (5YR 3/4) loamy fine sand; moderate medium subangular blocky structure; friable; about 2 percent weakly cemented ortstein fragments; many very fine to coarse roots; about 8 percent gravel, 3 percent cobbles, and 2 percent stones; very strongly acid; gradual wavy boundary.
- Bs2—17 to 25 inches; yellowish red (5YR 4/6) loamy fine sand; moderate medium subangular blocky structure; friable; about 2 percent weakly cemented ortstein fragments; common very fine to medium roots; about 8 percent gravel, 3 percent cobbles, and 2 percent stones; strongly acid; clear wavy boundary.
- E/B—25 to 45 inches; strong brown (7.5YR 4/6) fine to coarse sand (E); single grain; loose; occupies about 70 percent of the horizon penetrated by tongues of yellowish red (5YR 4/6) loamy fine sand and loamy very fine sand (Bt); few yellowish red (5YR 4/6) clay bridges between sand grains; weak coarse subangular blocky structure; firm; few very fine to medium roots; about 2 percent gravel; moderately acid; clear smooth boundary.
- B/E—45 to 56 inches; dark reddish brown (5YR 3/4) loamy fine sand and reddish brown (5YR 4/4) fine sandy loam (Bt); weak coarse subangular blocky structure; firm; common reddish brown (5YR 4/4) clay films on faces of peds and dark reddish brown (5YR 3/4) clay bridges between sand grains; occupies about 60 percent of the horizon penetrated by tongues of reddish brown (5YR 5/3) fine

sand (E); single grain; loose; few very fine to medium roots; about 1 percent gravel; strongly acid; clear wavy boundary.

E/B'—56 to 71 inches; strong brown (7.5YR 4/6) fine sand (E); single grain; loose; occupies about 70 percent of the horizon penetrated by tongues of dark reddish brown (5YR 3/4) loamy fine sand and reddish brown (5YR 4/4) fine sandy loam (Bt); very few reddish brown (5YR 4/4) clay bridges between sand grains and dark reddish brown (5YR 3/4) clay films on faces of peds; weak coarse subangular blocky structure; firm; few very fine to medium roots; about 1 percent gravel; moderately acid; clear wavy boundary.

B/E'—71 to 90 inches; reddish brown (5YR 3/4) fine sandy loam and yellowish red (5YR 4/6) loamy fine sand (Bt); weak coarse subangular blocky structure; firm; few dark reddish brown (5YR 3/4) clay films on faces of peds; occupies about 85 percent of the horizon penetrated by tongues of reddish brown (5YR 4/4) sand (E); single grain; loose; few very fine to medium roots; about 5 percent gravel; moderately acid.

Kinross Series

The Kinross series consists of very deep, poorly drained soils in depressions on outwash plains, stream terraces, lake plains, and ground moraines. These soils formed in sandy deposits. Permeability is rapid. Slopes range from 0 to 2 percent.

Typical pedon of Kinross mucky peat, 2,193 feet south and 60 feet west of the northeast corner of sec. 36, T. 45 N., R. 25 W., Forsyth Township, Marquette County, Michigan:

Oe—0 to 3 inches; black (7.5YR 2.5/1) mucky peat; weak medium granular structure; very friable; many very fine to medium roots; extremely acid; abrupt smooth boundary.

Oa—3 to 5 inches; very dark gray (7.5YR 3/1) muck; weak medium granular structure; very friable; many very fine to medium roots; extremely acid; abrupt smooth boundary.

E—5 to 10 inches; light brownish gray (10YR 6/2) sand, weak medium subangular blocky structure; very friable; many very fine to medium roots; many dark brown (10YR 3/3) and dark yellowish brown (10YR 4/4) masses of oxidized iron; extremely acid; abrupt wavy boundary.

Bhs—10 to 15 inches; very dark brown (7.5YR 2.5/2) sand; weak fine and medium subangular blocky structure; friable; many very fine to medium roots; common strong brown (7.5YR 4/6) and dark brown (7.5YR 3/4) masses of oxidized iron; 30 percent dark reddish brown (5YR 3/2) strongly cemented ortstein; about 3 percent gravel; extremely acid; clear wavy boundary.

Bs—15 to 30 inches; dark brown (7.5YR 3/4) sand; weak fine subangular blocky structure; very friable; common very fine and fine roots; common brown (7.5YR 4/3) masses of oxidized iron; about 3 percent gravel; very strongly acid; gradual wavy boundary.

BC—30 to 42 inches; dark yellowish brown (10YR 4/4) sand; single grain; loose; common strong brown (7.5YR 4/6) masses of oxidized iron; very strongly acid; gradual wavy boundary.

C—42 to 80 inches; brown (10YR 5/3) sand; single grain; loose; very strongly acid.

Leafriver Series

The Leafriver series consists of very deep, very poorly drained soils in concave areas or depressions on outwash plains, disintegration and kame moraines, glacial lake plains, river terraces, and dune landscapes. These soils formed in a thin organic

mantle and sandy outwash or lacustrine sediments. Permeability is moderate or moderately rapid in the organic material and rapid in the sandy sediments. Slopes are less than 1 percent.

Typical pedon of Leafriver muck, 0 to 1 percent slopes, SW¹/₄NE¹/₄ sec. 22, T. 49 N., R. 45 W., Gogebic County, Michigan:

- Oi—0 to 1 inch; black (N 2/), partially decomposed vegetative matter; clear smooth boundary.
- Oa—1 to 14 inches; muck (sapric material), black (7.5YR 2.5/1) broken face and very dark brown (7.5YR 2/2) rubbed; about 20 percent fiber, 5 percent rubbed; moderate medium platy structure; very friable; herbaceous fiber; moderately acid; clear smooth boundary.
- C—14 to 16 inches; brown (7.5Y 4/3) loamy sand; few fine distinct dark gray (10YR 4/1) iron depletions; weak fine and medium subangular blocky structure; very friable; 2 percent gravel; neutral; gradual wavy boundary.
- Cg—16 to 80 inches; dark brown (2.5Y 5/2) and reddish brown (5YR 4/4), stratified sand, loamy sand, fine sandy loam, and very gravelly coarse sand; common medium distinct brown (10YR 5/3) iron concentrations; massive; nonsticky; neutral.

Lode Series

The Lode series consists of very deep, well drained soils in glacial drainageways on stream terraces, deltas, and outwash plains. These soils formed in modified loamy eolian deposits and in the underlying sand and gravel. Permeability is moderate in the loamy mantle and very rapid in the sandy deposits. Slopes are commonly 1 to 3 percent but range from 1 to 35 percent.

Typical pedon of Lode silt loam, 1,650 feet west on Forest Road (FR) 436 from intersection of 436 and 945 and 660 feet north of FR 436, NE¹/₄NW¹/₄ sec. 29, T. 44 N., R. 36 W., Iron County, Michigan:

- Ap—0 to 7 inches; dark brown (7.5YR 3/2) silt loam, pinkish gray (7.5YR 6/2) dry; weak fine granular structure; friable; many fine and few coarse roots; few very fine vesicular pores; about 1 percent gravel; strongly acid; abrupt wavy boundary.
- Bs1—7 to 18 inches; dark brown (7.5YR 3/4) loam; weak medium subangular blocky structure; friable; common fine roots; few fine tubular pores; about 1 percent gravel; strongly acid; clear wavy boundary.
- Bs2—18 to 24 inches; dark brown (7.5YR 4/4) loam; moderate medium subangular blocky structure; friable; few fine prominent yellowish red (5YR 4/6) discolorations; very few fine roots; common fine tubular pores; about 1 percent gravel; strongly acid; clear wavy boundary.
- Bs3—24 to 31 inches; reddish brown (5YR 5/3) sandy loam; moderate thick platy structure; firm; few fine roots; common fine vesicular pores; few faint clay films on faces of peds; common coarse faint reddish brown (5YR 4/4) discolorations; about 5 percent gravel; very strongly acid; clear wavy boundary.
- 2BC—31 to 37 inches; strong brown (7.5YR 4/6) coarse sand; single grain; loose; common fine roots; about 8 percent gravel; strongly acid; clear wavy boundary.
- 2C1—37 to 59 inches; brown (7.5YR 4/4) sand; single grain; loose; about 5 percent gravel; moderately acid; abrupt wavy boundary.
- 2C2—59 to 80 inches; dark yellowish brown (10YR 4/4) sand; single grain; loose; about 5 percent gravel; moderately acid.

Loggerhead Series

The Loggerhead series consists of very deep, moderately well drained soils on ground moraines. These soils formed in loamy till. Permeability is moderate in the upper part of the solum and moderately slow in the lower part of the solum and in the substratum. Slopes range from 1 to 35 percent.

Typical pedon of Loggerhead gravelly loam, about 4 miles west of Silver City; 1,100 feet south and 1,600 feet west of the northeast corner of sec. 17, T. 51 N., R. 42 W., Ontonagon County, Michigan:

- A—0 to 4 inches; very dark brown (7.5YR 2.5/2) gravelly loam; moderate medium granular structure; friable; many very fine to coarse roots; 3 percent cobbles and 12 percent gravel; extremely acid; abrupt smooth boundary.
- E—4 to 5 inches; reddish brown (5YR 4/3) gravelly fine sandy loam; moderate fine subangular blocky structure; friable; many very fine to coarse roots; 3 percent cobbles and 12 percent gravel; extremely acid; abrupt broken boundary.
- Bs—5 to 15 inches; dark reddish brown (5YR 3/4) gravelly loam; moderate medium subangular blocky structure parting to moderate fine subangular blocky; friable; many very fine to coarse roots; 3 percent cobbles and 12 percent gravel; extremely acid; clear wavy boundary.
- E/B—15 to 36 inches; 35 percent red (2.5YR 4/6) gravelly fine sandy loam and 65 percent reddish brown (5YR 5/4) gravelly loam; moderate coarse subangular blocky structure parting to moderate medium subangular blocky; friable; common very fine to medium roots; 2 percent patchy faint reddish brown (5YR 5/4) (moist) clay films on surfaces along root channels; few fine faint yellowish red (5YR 5/6) (moist) masses of iron accumulation on faces of peds; 4 percent cobbles and 15 percent gravel; very strongly acid; gradual wavy boundary.
- B/E—36 to 56 inches; 40 percent reddish brown (5YR 5/4) and 60 percent reddish brown (2.5YR 4/4) gravelly fine sandy loam; weak coarse subangular blocky structure; friable; 10 percent patchy faint reddish brown (2.5YR 4/4) (moist) clay films on surfaces along root channels; 4 percent cobbles and 15 percent gravel; strongly acid; clear wavy boundary.
- 2Bt—56 to 80 inches; reddish brown (2.5YR 4/4) loam; weak very coarse prismatic structure; firm; 20 percent patchy faint reddish brown (2.5YR 4/4) (moist) clay films on vertical faces of peds; 6 percent gravel; strongly acid.

Loxley Series

The Loxley series consists of very deep, very poorly drained soils in depressions on lake plains, outwash plains, and till plains. These soils formed in mostly herbaceous organic material. Permeability is moderately slow to moderately rapid. Slopes are 0 to 1 percent.

Typical pedon of Loxley peat, 2,650 feet north and 600 feet west of the southeast corner of sec. 22, T. 55 N., R. 35 W., Stanton Township, Houghton County, Michigan:

- Oi—0 to 5 inches; dark yellowish brown (10YR 3/4) peat; 100 percent fiber, 100 percent rubbed; massive; primarily live roots and sphagnum moss; extremely acid; clear smooth boundary.
- Oa1—5 to 12 inches; muck, black (10YR 2/1) broken face and rubbed; about 30 percent fiber, 10 percent rubbed; massive; primarily herbaceous fibers; extremely acid; gradual smooth boundary.
- Oa2—12 to 26 inches; muck, very dark brown (10YR 2/2) broken face and rubbed; about 10 percent fiber, 2 percent rubbed; massive; primarily herbaceous fibers; extremely acid; gradual smooth boundary.

- Oa3—26 to 38 inches; muck, very dark brown (10YR 2/2) broken face and rubbed; about 15 percent fiber, 2 percent rubbed; massive; primarily herbaceous fibers; extremely acid; gradual smooth boundary.
- Oa4—38 to 45 inches; muck, dark brown (7.5YR 3/4) broken face and very dark brown (10YR 2/2) rubbed; about 60 percent fiber, 10 percent rubbed; massive; primarily herbaceous fibers; extremely acid; gradual smooth boundary.
- Oe—45 to 60 inches; mucky peat, brown (7.5YR 4/4) broken face and rubbed; about 90 percent fiber, 30 percent rubbed; massive; primarily herbaceous fibers; extremely acid.

Lupton Series

The Lupton series consists of very deep, very poorly drained soils in depressions on moraines, outwash plains, and lake plains. These soils formed in herbaceous and woody deposits. Permeability is moderately slow to moderately rapid. Slopes are 0 to 1 percent.

Typical pedon of Lupton muck, 2,400 feet east and 2,000 feet north of the southwest corner of sec. 31, T. 59 N., R. 29 W., Eagle Harbor Township, Keweenaw County, Michigan:

- Oa1—0 to 8 inches; muck, black (10YR 2/1) broken face, black (7.5YR 2.5/1) rubbed; about 15 percent fibers, 5 percent rubbed; weak thick platy structure; very friable; many very fine and fine roots; about 1 percent wood fragments; slightly acid; abrupt wavy boundary.
- Oa2—8 to 20 inches; muck, very dark brown (7.5YR 2.5/2) broken face and rubbed; about 10 percent fiber, 3 percent rubbed; weak medium and coarse subangular blocky structure; very friable; common very fine to medium roots; about 4 percent wood fragments; slightly acid; clear wavy boundary.
- Oa3—20 to 34 inches; muck, black (7.5YR 2.5/1) broken face and black (5YR 2.5/1) rubbed; about 12 percent fiber, 6 percent rubbed; weak medium subangular blocky structure; very friable; common fine and medium roots; about 11 percent wood fragments; neutral; clear wavy boundary.
- Oa4—34 to 80 inches; muck, black (7.5YR 2.5/1) broken face and black rubbed (5YR 2.5/1); about 18 percent fiber, 8 percent rubbed; weak medium subangular blocky structure; very friable; common fine and medium roots; about 12 percent wood fragments; neutral.

Manido Series

The Manido series consists of very deep, moderately well drained soils on outwash plains, lake plains, and outwash fans. These soils formed in sandy outwash. Permeability is rapid. Slopes range from 0 to 35 percent.

Typical pedon of Manido fine sand, 1,770 feet south and 1,350 feet west of the northeast corner of sec. 24, T. 51 N., R. 37 W., Bohemia Township, Ontonagon County, Michigan:

- Oe—0 to 3 inches; moderately decomposed plant material; many very fine to very coarse roots; extremely acid; abrupt smooth boundary.
- E—3 to 9 inches; pinkish gray (7.5YR 6/2) fine sand; single grain; loose; many very fine to very coarse roots; extremely acid; clear irregular boundary.
- Bhs—9 to 11 inches; reddish black (2.5YR 2.5/1) fine sand; weak medium subangular blocky structure; friable; many very fine to very coarse roots; 30 percent strongly cemented ortstein; ultra acid; clear irregular boundary.

- Bs—11 to 17 inches; dark reddish brown (5YR 3/4) fine sand; weak medium subangular blocky structure; friable; many medium to very coarse roots; 20 percent strongly cemented ortstein; extremely acid; gradual irregular boundary.
- BC—17 to 37 inches; strong brown (7.5YR 5/6) fine sand; weak coarse subangular blocky structure; very friable; 10 percent moderately cemented ortstein; about 1 percent gravel; extremely acid; gradual wavy boundary.
- E and Bt—37 to 60 inches; pinkish gray (7.5YR 6/2), stratified fine sand, sand, and very fine sand (E); brown (7.5YR 4/4) loamy sand (Bt) lamellae $\frac{1}{8}$ to $\frac{1}{4}$ inch thick; massive; very friable; common strong brown (7.5YR 5/8) masses of oxidized iron; about 1 percent gravel; extremely acid; gradual smooth boundary.
- C—60 to 80 inches; brown (7.5YR 5/4), stratified fine sand, sand, and very fine sand; massive; very friable; few strong brown (7.5YR 4/6 and 5/6) masses of oxidized iron; about 1 percent gravel and 1 percent cobbles; extremely acid.

Manitowish Series

The Manitowish series consists of very deep, moderately well drained soils on outwash terraces and outwash plains. These soils formed in a thin mantle of loamy material over sandy outwash. Permeability is moderate or moderately rapid in the loamy part of the solum, moderately rapid to very rapid in the sandy part of the solum, and rapid or very rapid in the substratum. Slopes range from 0 to 18 percent.

Typical pedon of Manitowish sandy loam, 212 feet north and 660 feet east of the southwest corner of sec. 8, T. 44 N., R. 37 W., Stambaugh Township, Iron County, Michigan:

- Oi—0 to 1 inch; slightly decomposed, loose leaf litter and twigs.
- Oa—1 to 2 inches; black (5YR 2.5/1), well decomposed forest litter; many very fine to coarse roots; extremely acid; abrupt smooth boundary.
- E—2 to 4 inches; brown (7.5YR 4/2) sandy loam; weak medium subangular blocky structure; friable; common very fine to coarse roots; about 8 percent cobbles and 4 percent gravel; extremely acid; abrupt wavy boundary.
- Bhs—4 to 5 inches; dark reddish brown (5YR 3/3) sandy loam; moderate fine granular structure; friable; many very fine to coarse roots; about 8 percent cobbles and 4 percent gravel; extremely acid; clear wavy boundary.
- Bs—5 to 10 inches; dark reddish brown (5YR 3/4) sandy loam; weak medium subangular blocky structure parting to weak fine granular; friable; many very fine to coarse roots; about 8 percent cobbles and 4 percent gravel; very strongly acid; clear wavy boundary.
- Bw—10 to 22 inches; brown (7.5YR 4/4) sandy loam; weak thick platy structure; friable; common very fine to medium roots; few strong brown (7.5YR 4/6) masses of oxidized iron; about 8 percent cobbles and 4 percent gravel; very strongly acid; clear wavy boundary.
- 2BC—22 to 40 inches; brown (7.5YR 4/4) gravelly loamy sand; single grain; loose; common very fine to medium roots; about 15 percent gravel and 5 percent cobbles; very strongly acid; gradual wavy boundary.
- 2C—40 to 80 inches; brown (7.5YR 5/4) gravelly sand; single grain; loose; about 15 percent gravel and 5 percent cobbles; strongly acid.

Matchwood Series

The Matchwood series consists of very deep, poorly drained soils on till plains. These soils formed in clayey material overlying loamy material. Permeability is very slow in the clayey material and moderate or moderately slow in the loamy material. Slopes range from 0 to 2 percent.

Soil Survey of Gogebic County, Michigan

Typical pedon of Matchwood mucky clay, 0 to 2 percent slopes, frequently ponded, 360 feet south and 110 feet west of the northeast corner of sec. 12, T. 48 N., R. 41 W., Matchwood Township, Ontonagon County, Michigan:

- Oa—0 to 1 inch; dark reddish brown (5YR 3/2), highly decomposed organic material; about 1 percent gravel; abrupt smooth boundary.
- A—1 to 4 inches; black (7.5YR 2.5/1) mucky clay; strong medium and coarse granular structure; very friable; common very fine to coarse roots; common strong brown (7.5YR 5/6) masses of oxidized iron; about 1 percent gravel; very strongly acid; abrupt wavy boundary.
- Bg—4 to 10 inches; brown (7.5YR 4/2) clay; strong coarse prismatic structure parting to moderate coarse subangular blocky; friable; common very fine to medium roots; common gray (7.5YR 5/1) masses of reduced iron; many fine and medium strong brown (7.5YR 5/8) and reddish yellow (7.5YR 6/8) masses of oxidized iron; about 1 percent gravel; strongly acid; clear wavy boundary.
- Bt1—10 to 17 inches; brown (7.5YR 4/3) clay; strong coarse prismatic structure parting to moderate coarse subangular blocky; firm; common very fine to medium roots; many brown (7.5YR 5/3) clay films on faces of peds; common gray (7.5YR 5/1) masses of reduced iron; about 1 percent gravel; moderately acid; clear wavy boundary.
- Bt2—17 to 29 inches; reddish brown (5YR 5/4) clay; moderate coarse subangular blocky structure; firm; common fine and medium roots; many brown (7.5YR 5/3) clay films on faces of peds; common gray (N 5/ and 7.5YR 5/1) masses of reduced iron; many strong brown (7.5YR 5/6) and yellowish brown (10YR 5/6) masses of oxidized iron; about 2 percent gravel; neutral; clear wavy boundary.
- 2BC—29 to 37 inches; reddish brown (5YR 5/4) clay; moderate medium and coarse subangular blocky structure; firm; common very fine roots; common yellowish brown (10YR 5/6) and many strong brown (7.5YR 5/6) masses of oxidized iron; about 5 percent gravel; moderately alkaline; gradual wavy boundary.
- 2Cd1—37 to 50 inches; reddish brown (5YR 5/4) silty clay loam; weak medium and coarse angular blocky structure; firm; about 5 percent gravel; violent effervescence; moderately alkaline; gradual wavy boundary.
- 2Cd2—50 to 80 inches; reddish brown (5YR 4/3) silty clay loam; massive; about 2 percent gravel; violent effervescence; strongly alkaline.

McMillan Series

The McMillan series consists of very deep, well drained soils on end moraines and outwash plains. These soils formed in loamy material over sandy deposits. Permeability is moderate in the upper part of the solum and rapid in the lower part of the solum and in the substratum. Slopes range from 1 to 55 percent.

Typical pedon of McMillan fine sandy loam, 390 feet south and 1,500 feet west of the northeast corner of sec. 29, T. 46 N., R. 42 W., Marenisco Township, Gogebic County, Michigan:

- Oe—0 to 1 inch; very dark brown (10YR 2/2), moderately decomposed plant material; many very fine to coarse roots; about 2 percent cobbles and 3 percent gravel; very strongly acid; abrupt smooth boundary.
- A—1 to 2 inches; very dark gray (10YR 3/1) fine sandy loam; weak medium granular structure; very friable; many very fine to coarse roots; about 2 percent cobbles and 3 percent gravel; strongly acid; abrupt wavy boundary.
- E—2 to 5 inches; dark reddish gray (5YR 4/2) fine sandy loam; weak fine subangular blocky structure; very friable; many very fine to coarse roots; about 2 percent cobbles and 3 percent gravel; strongly acid; clear wavy boundary.

- Bhs—5 to 9 inches; dark reddish brown (5YR 3/3) fine sandy loam; weak thick platy structure parting to moderate fine subangular blocky; friable; many very fine to coarse roots; about 3 percent cobbles and 4 percent gravel; strongly acid; clear wavy boundary.
- Bs1—9 to 14 inches; dark brown (7.5YR 3/4) fine sandy loam; moderate thick platy structure; friable; common very fine to medium roots; about 3 percent cobbles and 4 percent gravel; strongly acid; clear wavy boundary.
- Bs2—14 to 19 inches; brown (7.5YR 4/4) fine sandy loam; weak medium subangular blocky structure; very friable; common very fine to medium roots; about 2 percent gravel; strongly acid; gradual wavy boundary.
- Bw—19 to 29 inches; brown (10YR 4/3) fine sand; weak medium subangular blocky structure; very friable; few very fine and fine roots; strongly acid; gradual wavy boundary.
- E and Bt—29 to 72 inches; brown (7.5YR 4/3) sand and reddish brown (5YR 4/4) loamy fine sand; massive; friable; few very fine and fine roots; lamellae $\frac{1}{8}$ to $\frac{1}{2}$ inch thick; some platy structure and firmness intermittently in the upper part; moderately acid; clear smooth boundary.
- C—72 to 80 inches; dark grayish brown (10YR 4/2), stratified coarse sand, sand, and loamy sand; single grain; loose; about 5 percent gravel; neutral.

Michigamme Series

The Michigamme series consists of moderately deep, well drained soils on ground moraines. These soils formed in a silty or loamy mantle over loamy till underlain by igneous or metamorphic bedrock. Permeability is moderate in the upper part of the solum and slow or very slow in the lower part. Slopes range from 8 to 75 percent.

Typical pedon of Michigamme cobbly silt loam, 2,200 feet south and 300 feet east of the northwest corner of sec. 12, T. 47 N., T. 34 W., Covington Township, Baraga County, Michigan:

- Oi—0 to 1 inch; slightly decomposed leaf litter and twigs.
- A—1 to 2 inches; dark reddish brown (5YR 2.5/2) cobbly silt loam; moderate fine granular structure; very friable; many fine roots; about 2 percent gravel and 30 percent cobbles; extremely acid; clear smooth boundary.
- E—2 to 4 inches; brown (7.5YR 5/2) cobbly silt loam; weak medium subangular blocky structure; friable; many fine roots; about 2 percent gravel and 30 percent cobbles; extremely acid; clear wavy boundary.
- Bhs—4 to 7 inches; dark reddish brown (5YR 3/2) silt loam; weak medium subangular blocky structure parting to weak fine granular; friable; many fine and medium roots; about 3 percent gravel and 10 percent cobbles; extremely acid; clear wavy boundary.
- Bs1—7 to 14 inches; dark reddish brown (5YR 3/4) silt loam; weak medium subangular blocky structure; friable; many fine and medium roots; about 2 percent gravel; very strongly acid; gradual wavy boundary.
- Bs2—14 to 20 inches; reddish brown (5YR 4/4) silt loam; weak medium subangular blocky structure; friable; common fine roots; about 3 percent gravel and 10 percent cobbles; strongly acid; gradual wavy boundary.
- Bs3—20 to 24 inches; brown (7.5YR 4/4) very cobbly silt loam; weak fine subangular blocky structure; friable; few fine roots; about 10 percent gravel and 30 percent cobbles; strongly acid; gradual irregular boundary.
- 2E/Bx—24 to 31 inches; about 55 percent brown (10YR 5/3) and 45 percent dark reddish brown (5YR 3/4) very cobbly fine sandy loam; weak medium angular

blocky structure; friable; few fine roots; about 20 percent gravel and 15 percent cobbles; strongly acid; abrupt smooth boundary.
3R—31 inches; metamorphic bedrock.

Minocqua Series

The Minocqua series consists of very deep, poorly drained soils on outwash plains and outwash terraces. These soils are moderately deep to stratified sandy outwash. They formed in silty and loamy material underlain by sandy outwash. Permeability is moderate in the silty and loamy material and rapid or very rapid in the sandy outwash. Slopes range from 0 to 2 percent.

Typical pedon of Minocqua muck, 1,440 feet south and 1,850 feet east of the northwest corner of sec. 10, T. 45 N., R. 33 W., Hematite Township, Iron County, Michigan:

- Oa—0 to 4 inches; black (10YR 2/1) muck; weak medium granular structure; friable; many fine and medium roots; about 5 percent cobbles; very strongly acid; abrupt wavy boundary.
- A—4 to 6 inches; very dark gray (10YR 3/1) silt loam; weak fine granular structure; friable; common fine and medium roots; about 5 percent gravel and 5 percent cobbles; strongly acid; clear wavy boundary.
- Bg—6 to 25 inches; gray (5Y 5/1) loam; weak thick and very thick platy structure; firm; few fine roots; many olive brown (2.5Y 4/4) masses of oxidized iron; about 8 percent gravel and 3 percent cobbles; strongly acid; clear wavy boundary.
- 2BCg—25 to 29 inches; grayish brown (2.5Y 5/2) loamy coarse sand; massive; very friable; about 8 percent gravel and 3 percent cobbles; strongly acid; gradual wavy boundary.
- 2Cg—29 to 80 inches; dark grayish brown (2.5Y 4/2), stratified coarse sand and gravelly coarse sand; single grain; loose; about 30 percent gravel and 5 percent cobbles; strongly acid.

Miskoaki Series

The Miskoaki series consists of very deep, well drained soils on till plains. These soils formed in clayey till. Permeability is extremely slow or very slow. Slopes range from 1 to 70 percent.

Typical pedon of Miskoaki clay loam, 160 feet north and 100 feet east of the southwest corner of sec. 6, T. 47 N., R. 13 W., Parkland Township, Douglas County, Wisconsin:

- A—0 to 4 inches; dark reddish brown (5YR 3/2) clay loam; moderate medium granular structure; friable; many fine to coarse roots; about 1 percent gravel; moderately acid; abrupt smooth boundary.
- E/B—4 to 10 inches; 60 percent reddish gray (5YR 5/2) silt loam (E); moderate thick platy structure; friable; extends as tongues into and surrounds remnants of reddish brown (5YR 4/4) silty clay loam (Bt); moderate medium subangular blocky structure; firm; many fine to coarse roots; common reddish brown (2.5YR 4/4) clay films; about 2 percent gravel; strongly acid; clear wavy boundary.
- Bt1—10 to 14 inches; dark red (2.5YR 3/6) clay; moderate medium angular blocky structure; firm; many fine to coarse roots; common dark reddish brown (2.5YR 3/4) clay films; about 1 percent gravel; strongly acid; clear wavy boundary.
- Bt2—14 to 25 inches; reddish brown (2.5YR 4/4) clay; moderate medium angular blocky structure; firm; many fine to coarse roots; common dark reddish brown

- (2.5YR 3/4) clay films; about 1 percent gravel; slightly alkaline; abrupt wavy boundary.
- Btk1—25 to 46 inches; reddish brown (2.5YR 4/4) clay; strong medium angular blocky structure; firm; common fine roots; common dark reddish brown (2.5YR 3/4) clay films; common pink (5YR 8/3) soft masses of calcium carbonate; about 1 percent gravel; violently effervescent; moderately alkaline; clear wavy boundary.
- Btk2—46 to 52 inches; reddish brown (2.5YR 4/4) clay; weak coarse angular blocky structure; firm; few fine roots; common dark reddish brown (2.5YR 3/4) clay films; common pink (5YR 8/3) soft masses of calcium carbonate; about 1 percent gravel; strongly effervescent; moderately alkaline; gradual wavy boundary.
- BC—52 to 80 inches; reddish brown (2.5YR 4/4) clay; weak coarse prismatic structure; firm; few fine roots; common pink (5YR 7/3) soft masses of calcium carbonate; about 1 percent gravel; strongly effervescent; moderately alkaline.

Monico Series

The Monico series consists of deep, somewhat poorly drained soils on ground moraines and in interdrumlin areas. These soils formed in silty or loamy deposits or both and in the underlying sandy loam or loamy sand till. Permeability is moderate in the solum and in the substratum. Slopes range from 0 to 6 percent.

Typical pedon of Monico silt loam, about 1½ miles northwest of Phelps; 160 feet south and 415 feet west of the northeast corner of sec. 34, T. 42 N., R. 11 E., Vilas County, Wisconsin:

- A—0 to 4 inches; dark brown (10YR 3/2) silt loam, pinkish gray (7.5YR 6/2) dry; moderate fine granular structure; friable; many fine and coarse roots; about 5 percent pebbles and 8 percent cobbles; very strongly acid; abrupt wavy boundary.
- E—4 to 7 inches; brown (7.5YR 4/2) silt loam; weak medium platy structure parting to moderate very fine subangular blocky; friable; many fine and coarse roots; about 5 percent pebbles and 8 percent cobbles; very strongly acid; abrupt wavy boundary.
- Bs1—7 to 13 inches; reddish brown (5YR 4/4) fine sandy loam; few medium prominent yellowish red (5YR 5/8) mottles; moderate fine and medium subangular blocky structure; friable; common fine and medium roots; common fine soft rounded accumulations (iron manganese oxides); about 5 percent pebbles and 8 percent cobbles; strongly acid; clear wavy boundary.
- Bs2—13 to 21 inches; brown (7.5YR 4/4) fine sandy loam; common medium prominent yellowish red (5YR 5/8) mottles; moderate fine and medium subangular blocky structure; friable; few fine roots; common fine soft rounded accumulations (iron manganese oxides); about 5 percent pebbles and 8 percent cobbles; strongly acid; clear wavy boundary.
- 2BC—21 to 36 inches; brown (7.5YR 5/4) sandy loam; few medium prominent yellowish red (5YR 5/8) mottles; weak medium and coarse subangular blocky structure; friable; few fine roots; stratified with a few lenses of loamy sand 5 mm thick; blocky peds tend to part along lenses; about 10 percent pebbles and 4 percent cobbles; moderately acid; clear wavy boundary.
- 2C—36 to 80 inches; brown (7.5YR 5/4) gravelly loamy sand; few medium distinct yellowish red (5YR 5/6) mottles; massive; friable; about 10 percent pebbles and 6 percent cobbles; slightly acid.

Moodig Series

The Moodig series consists of very deep, somewhat poorly drained soils on moraines and drumlins. These soils formed in till. The till is mostly sandy loam. Permeability is moderate. Slopes range from 0 to 4 percent.

Typical pedon of Moodig sandy loam, about 1 mile north and 5 miles west of Bradley; 990 feet south and 550 feet west of the northeast corner of sec. 4, T. 35 N., R. 5 E., Lincoln County, Wisconsin:

- A—0 to 3 inches; very dark gray (10YR 3/1) sandy loam, gray (10YR 5/1) dry; moderate medium granular structure; friable; many fine, common medium, and few coarse roots; many fine irregular pores; common uncoated sand grains; few charcoal fragments; 8 percent gravel and about 5 percent cobbles; very strongly acid; abrupt wavy boundary.
- E—3 to 5 inches; brown (7.5YR 5/2) gravelly sandy loam, light gray (5YR 7/1) dry; weak medium platy structure; very friable; many fine, common medium, and few coarse roots; many fine irregular pores; many very dark gray (10YR 3/1) and dark brown (7.5YR 3/3) wormcasts; 12 percent gravel and about 5 percent cobbles; extremely acid; abrupt broken boundary.
- Bhs—5 to 9 inches; dark brown (7.5YR 3/3) gravelly sandy loam; weak very fine subangular blocky structure; very friable; many fine, common medium, and few coarse roots; many fine irregular pores; 22 percent gravel and about 8 percent cobbles; extremely acid; clear smooth boundary.
- Bs1—9 to 14 inches; dark brown (7.5YR 3/4) gravelly sandy loam; weak fine subangular blocky structure; very friable; many fine and few medium roots; many fine irregular pores; common medium and few fine tubular pores; few fine prominent dark reddish brown (2.5YR 2/4) masses of iron accumulation; few fine prominent dark reddish brown (2.5YR 2/2) concretions (iron and manganese oxides); 16 percent gravel and about 9 percent cobbles; very strongly acid; clear wavy boundary.
- Bs2—14 to 22 inches; dark brown (7.5YR 4/4) sandy loam; weak medium subangular blocky structure; friable; many fine and few medium roots; many fine irregular pores; few fine and medium tubular pores; few fine prominent dark reddish brown (2.5YR 3/4) and common medium prominent yellowish red (5YR 4/6) masses of iron accumulation; few fine prominent dark reddish brown (5YR 2/2) concretions (iron and manganese oxides); 9 percent gravel and about 3 percent cobbles; very strongly acid; clear wavy boundary.
- E/B—22 to 33 inches; 70 percent brown (10YR 5/3) loamy sand and sandy loam (E), very pale brown (10YR 7/3) dry; weak medium platy structure; very friable; surrounds remnants of brown (7.5YR 4/4) sandy loam (Bt); weak fine subangular blocky structure; friable; few prominent dark reddish brown (2.5YR 3/4) clay films on faces of peds; few fine and medium roots; many fine irregular pores; few fine and medium tubular pores; common medium faint and prominent grayish brown (10YR 5/2) iron depletions; common fine prominent dark red (2.5YR 3/6) and common medium prominent yellowish red (5YR 4/6) masses of iron accumulation; 11 percent gravel and about 3 percent cobbles; strongly acid; abrupt wavy boundary.
- B/E—33 to 53 inches; 60 percent brown (7.5YR 4/3) gravelly sandy loam (Bt); moderate very fine angular blocky structure; friable; tends to break to moderate medium plates along horizontal cleavage planes inherited from the parent material; few distinct reddish brown (5YR 4/3) clay films on faces of peds; penetrated by tongues of brown (7.5YR 5/3) sandy loam (E), pink (7.5YR 7/3) dry; weak medium platy structure; very friable; few fine roots; few fine and medium tubular pores; common coatings of brown (10YR 5/3) clean sand grains on faces of plates; few medium distinct brown (10YR 5/3) iron depletions and

common coarse prominent yellowish red (5YR 4/6) masses of iron accumulation; few thin (1 to 3 inches thick) discontinuous lenses of weak red (2.5YR 5/2) and brown (7.5YR 5/3) sandy loam bordered by 1/4 inch of dark red (2.5YR 3/6) sandy loam; 17 percent gravel and about 5 percent cobbles; moderately acid; gradual wavy boundary.

Bt—53 to 73 inches; brown (7.5YR 4/3) gravelly sandy loam; moderate very fine angular blocky structure; friable; tends to break to moderate medium plates along horizontal cleavage planes inherited from the parent material; common distinct reddish brown (5YR 4/3) clay films on faces of peds; common coatings of brown (10YR 5/3) clean sand grains on faces of plates; few medium prominent yellowish red (5YR 4/6) masses of iron accumulation; 23 percent gravel and about 5 percent cobbles; slightly acid; gradual wavy boundary.

C—73 to 95 inches; brown (7.5YR 4/3) gravelly sandy loam; massive; friable; 23 percent gravel and about 10 percent cobbles; slightly acid.

Moquah Series

The Moquah series consists of moderately well drained soils on flood plains. These soils formed in loamy alluvium. Permeability is moderate or moderately slow. Slopes range from 0 to 3 percent.

Typical pedon of Moquah fine sandy loam, 1 1/2 miles southeast of Moquah; 1,000 feet south and 660 feet east of the center of sec. 13, T. 47 N., R. 6 W., Bayfield County, Wisconsin:

A—0 to 5 inches; dark brown (7.5YR 3/2) fine sandy loam, pinkish gray (7.5YR 6/2) dry; weak very fine granular structure; very friable; many fine roots; slightly acid; abrupt wavy boundary.

C1—5 to 19 inches; reddish brown (5YR 5/3) fine sandy loam stratified with thin lenses of silt loam and fine sand; fine stratification breaking to thick platy fragments; very friable; few fine roots; slightly acid; clear wavy boundary.

C2—19 to 48 inches; reddish brown (5YR 5/3) very fine sandy loam stratified with thin lenses of silt loam and fine sand; fine stratification breaking to thick platy fragments; very friable; slightly acid; clear wavy boundary.

C3—48 to 55 inches; reddish brown (5YR 4/4) silt loam; common fine prominent strong brown (7.5YR 5/6) masses of iron accumulation; fine stratification breaking to thick platy fragments; very friable; slightly acid; clear wavy boundary.

C4—55 to 80 inches; reddish brown (5YR 5/4) fine sand and sand; stratified; single grain; loose; slightly acid.

Net Series

The Net series consists of very deep, somewhat poorly drained soils on ground moraines and end moraines. These soils formed in modified loamy eolian material and in the underlying gravelly loamy sand or gravelly sandy loam till. They have a fragipan. Permeability is moderate above the fragipan, very slow in the fragipan, and moderately rapid or moderate below the fragipan. Slopes range from 0 to 4 percent.

Typical pedon of Net stony silt loam, about 6 miles west of Nestoria; 240 feet north and 25 feet east of the southwest corner of sec. 6, T. 48 N., R. 32 W., Baraga County, Michigan:

Oi—2 inches to 0; recent hardwood litter.

A—0 to 3 inches; very dark brown (10YR 2/2) stony silt loam, dark gray (10YR 4/1) dry; weak very fine granular structure; very friable; many fine and medium roots;

- about 5 percent gravel and 5 percent cobbles; extremely acid; abrupt smooth boundary.
- E—3 to 6 inches; brown (7.5YR 5/2) gravelly silt loam; common medium distinct dark grayish brown (10YR 4/2) and common fine prominent yellowish red (5YR 4/6) mottles; weak medium subangular blocky structure; friable; many fine and common medium roots; about 20 percent gravel and 7 percent cobbles; extremely acid; abrupt wavy boundary.
- Bhs—6 to 7 inches; dark reddish brown (5YR 3/3) gravelly loam; common fine distinct yellowish red (5YR 4/6) mottles; moderate fine granular structure; friable; many fine and common medium roots; about 25 percent gravel and 10 percent cobbles; very strongly acid; clear broken boundary.
- Bs1—7 to 15 inches; dark brown (7.5YR 4/4) gravelly silt loam; few fine prominent yellowish red (5YR 4/6) mottles; weak medium subangular blocky structure parting to moderate fine granular; friable; common fine and medium roots; few fine pores; about 20 percent gravel and 10 percent cobbles; very strongly acid; clear wavy boundary.
- 2Bs2—15 to 23 inches; dark brown (10YR 4/3) gravelly fine sandy loam; common fine prominent strong brown (7.5YR 5/6) mottles; moderate medium subangular blocky structure; friable; few fine roots; about 20 percent gravel and 5 percent cobbles; strongly acid; clear wavy boundary.
- 2Bx—23 to 39 inches; dark grayish brown (2.5Y 4/2) gravelly sandy loam; few medium prominent dark yellowish brown (10YR 4/4) mottles; massive; firm; vesicular pores; common distinct dark grayish brown (10YR 4/2) clay films in pores; about 20 percent gravel and 5 percent cobbles; strongly acid; clear wavy boundary.
- 2C—39 to 80 inches; dark grayish brown (2.5Y 4/2) gravelly sandy loam; few medium prominent strong brown (7.5YR 4/6) mottles; moderate medium subangular blocky structure; friable; about 25 percent gravel and 5 percent cobbles; moderately acid.

Nonesuch Series

The Nonesuch series consists of moderately deep, moderately well drained soils on till plains and postglacial lake shorelines. These soils formed in loamy material overlying sedimentary bedrock. Permeability is moderately slow. Slopes range from 1 to 18 percent.

Typical pedon of Nonesuch gravelly loam, 1,720 feet north and 1,890 feet east of the southwest corner of sec. 16, T. 51 N., R. 41 W., Carp Lake Township, Ontonagon County, Michigan:

- Oe—0 to 1 inch; black (5YR 2.5/1), slightly decomposed leaf litter; weak fine granular structure; very friable; many very fine to very coarse roots; extremely acid; abrupt smooth boundary.
- E—1 to 4 inches; dark reddish brown (5YR 3/3) gravelly loam; weak medium granular structure; friable; many very fine to very coarse roots; about 20 percent gravel; extremely acid; clear smooth boundary.
- Bs—4 to 11 inches; reddish brown (5YR 4/3) gravelly loam; weak fine subangular blocky structure; friable; many fine to very coarse roots; about 10 percent gravel; very strongly acid; abrupt wavy boundary.
- Bt1—11 to 16 inches; reddish brown (5YR 4/3) very gravelly fine sandy loam; weak fine and very fine subangular blocky structure; friable; many fine and medium roots; few faint reddish brown (2.5YR 4/3) clay films on faces of peds; about 30

- percent gravel, 10 percent channers, and 2 percent cobbles; very strongly acid; clear wavy boundary.
- Bt2—16 to 23 inches; reddish brown (5YR 4/4) gravelly sandy loam; weak very fine subangular blocky structure; very friable; many very fine and fine roots; few faint reddish brown (2.5YR 4/4) clay films on faces of peds; about 20 percent gravel and 10 percent channers; very strongly acid; clear wavy boundary.
- B/Ex—23 to 34 inches; 60 percent reddish brown (2.5YR 4/4) and 40 percent reddish brown (5YR 4/4) silt loam; moderate very fine and fine subangular blocky structure; firm; common fine roots; many faint reddish brown (2.5YR 4/4) clay films and few faint reddish brown (5YR 5/4) sand coatings on faces of peds; few medium yellowish red (5YR 5/8) masses of oxidized iron on rock fragments; about 10 percent gravel; very strongly acid; abrupt wavy boundary.
- Crt—34 to 50 inches; 95 percent dark reddish brown (2.5YR 3/3) and 5 percent light reddish brown (5YR 6/3) soft rock and silt loam lenses; massive; friable; few very fine roots; many faint reddish brown (2.5YR 3/3) clay films on rock fragments; about 10 percent gravel; very strongly acid; diffuse irregular boundary.
- 2R—50 inches; siltstone bedrock.

Noseum Series

The Noseum series consists of very deep, moderately well drained soils on outwash plains, stream terraces, and glaciofluvial fans and in outwash areas on moraines. These soils formed in loamy deposits underlain by sandy outwash. Permeability is moderately rapid in the loamy deposits and rapid in the sandy outwash. Slopes range from 0 to 12 percent.

Typical pedon of Noseum fine sandy loam, 560 feet south and 1,260 feet west of the northeast corner of sec. 8, T. 46 N., R. 38 W., Interior Township, Ontonagon County, Michigan:

- Oa—0 to 1 inch; black (7.5YR 2.5/1), highly decomposed plant material; very friable; many fine to very coarse roots; very strongly acid; abrupt wavy boundary.
- E—1 to 4 inches; brown (7.5YR 4/2) fine sandy loam; weak fine subangular blocky structure; very friable; many very fine to very coarse roots; about 1 percent gravel; moderately acid; abrupt wavy boundary.
- Bhs—4 to 6 inches; dark brown (7.5YR 3/3) fine sandy loam; weak fine subangular blocky structure; very friable; many very fine to very coarse roots; about 1 percent gravel; moderately acid; abrupt wavy boundary.
- Bs1—6 to 14 inches; dark brown (7.5YR 3/4) fine sandy loam; weak fine subangular blocky structure; very friable; many very fine to very coarse roots; about 1 percent gravel; moderately acid; clear wavy boundary.
- 2Bs2—14 to 24 inches; brown (7.5YR 4/4) loamy sand; weak medium subangular blocky structure; very friable; common very fine to coarse roots; about 1 percent gravel; moderately acid; clear wavy boundary.
- 2BC—24 to 37 inches; strong brown (7.5YR 5/6) sand; weak medium subangular blocky structure; very friable; few very fine and fine roots; many strong brown (7.5YR 4/6) and brown (7.5YR 5/4) masses of oxidized iron; moderately acid; clear wavy boundary.
- 2C1—37 to 63 inches; brown (10YR 5/3) fine sand; massive; very friable; few strong brown (7.5YR 5/6) masses of oxidized iron; moderately acid; clear smooth boundary.
- 2C2—63 to 80 inches; brown (10YR 4/3) sand; single grain; loose; few brown (7.5YR 5/4) masses of oxidized iron; about 1 percent gravel; moderately acid.

Oldman Series

The Oldman series consists of very deep, moderately well drained soils on ground moraines and end moraines. These soils formed in loamy till. They have a fragipan. Permeability is moderately rapid in the upper part of the profile, very slow in the fragipan, and moderately slow below the fragipan. Slopes range from 1 to 35 percent.

The Oldman soils in this survey area are taxadjuncts because they do not have an argillic horizon in the lower part of the profile. This difference, however, does not significantly affect the use and management of the soils.

Typical pedon of Oldman gravelly silt loam, 1,300 feet north and 490 feet west of the southeast corner of sec. 11, T. 50 N., R. 44 W., Carp Lake Township, Ontonagon County, Michigan:

- Oe—0 to 1 inch; reddish gray (2.5YR 5/1), moderately decomposed plant material; weak fine granular structure; friable; many very fine to medium roots; about 2 percent flagstones and 15 percent gravel; moderately acid; clear smooth boundary.
- A—1 to 3 inches; very dark gray (7.5YR 3/1) gravelly silt loam; moderate medium subangular blocky structure; friable; many very fine to coarse roots; about 2 percent flagstones, 2 percent cobbles, and 10 percent gravel; strongly acid; abrupt smooth boundary.
- Bhs1—3 to 11 inches; dark reddish brown (5YR 3/3) very gravelly silt loam; moderate medium subangular blocky structure; friable; many fine to coarse roots; about 2 percent flagstones, 35 percent cobbles, and 20 percent gravel; moderately acid; clear smooth boundary.
- Bhs2—11 to 23 inches; dark reddish brown (5YR 3/3) very gravelly silt loam; moderate medium subangular blocky structure; friable; many fine to coarse roots; about 1 percent flagstones, 23 percent cobbles, and 35 percent gravel; moderately acid; clear wavy boundary.
- B/Ex—23 to 28 inches; 70 percent dark reddish brown (5YR 2.5/2) and 30 percent reddish brown (5YR 4/3) very gravelly fine sandy loam; moderate coarse subangular blocky structure parting to weak medium subangular blocky; friable; common yellowish red (5YR 5/6) masses of oxidized iron; about 12 percent cobbles and 30 percent gravel; moderately acid; clear wavy boundary.
- Btx—28 to 43 inches; reddish brown (5YR 4/4) extremely bouldery fine sandy loam; moderate coarse subangular blocky structure parting to weak medium subangular blocky; friable; few reddish brown (5YR 4/4) clay films; common yellowish red (5YR 5/6) masses of oxidized iron; about 20 percent boulders, 2 percent flagstones, 15 percent cobbles, and 30 percent gravel; strongly acid; gradual wavy boundary.
- Bx1—43 to 58 inches; reddish brown (5YR 4/4) very bouldery loamy fine sand; moderate coarse subangular blocky structure parting to weak thick platy; friable; common yellowish red (5YR 5/6) masses of oxidized iron; about 25 percent boulders, 16 percent cobbles, and 3 percent gravel; strongly acid; clear wavy boundary.
- Bx2—58 to 80 inches; reddish brown (5YR 4/4) fine sandy loam; moderate coarse subangular blocky structure parting to weak thick platy; friable; about 10 percent gravel; moderately acid; clear broken boundary.

Payseor Series

The Payseor series consists of very deep, somewhat poorly drained soils on till plains. These soils formed in clayey material overlying loamy till. Permeability is very

slow in the clayey material and moderate or moderately slow in the loamy material. Slopes range from 0 to 3 percent.

Typical pedon of Payseor silty clay loam, 2,300 feet north and 2,630 feet west of the southeast corner of sec. 4, T. 47 N., R. 38 W., Interior Township, Ontonagon County, Michigan:

- Ap—0 to 7 inches; dark reddish brown (5YR 3/2) silty clay loam, dark reddish gray (5YR 4/2) dry; strong fine and medium granular structure; firm; many very fine and fine roots; moderately acid; clear smooth boundary.
- A—7 to 10 inches; reddish brown (5YR 4/3) clay, reddish gray (5YR 5/2) dry; moderate coarse subangular blocky structure parting to strong fine and medium subangular blocky; very firm; common very fine roots; common medium distinct yellowish red (5YR 4/6) masses of oxidized iron and many medium faint dark reddish gray (5YR 4/2) masses of reduced iron; moderately acid; clear smooth boundary.
- Bt1—10 to 18 inches; reddish brown (5YR 4/4) clay; moderate medium prismatic structure parting to moderate fine and medium subangular blocky; very firm; few very fine roots; many continuous faint reddish brown (5YR 4/4) clay films on all faces of peds; common medium distinct yellowish red (5YR 4/6) masses of oxidized iron and common medium distinct dark reddish gray (5YR 4/2) masses of reduced iron; slightly acid; clear smooth boundary.
- Bt2—18 to 25 inches; reddish brown (5YR 4/4) clay; moderate coarse prismatic structure parting to strong fine and medium subangular blocky; very firm; few very fine roots; many continuous faint reddish brown (5YR 4/4) clay films on all faces of peds; common medium distinct dark reddish gray (5YR 4/2) masses of reduced iron on faces of peds and common medium distinct yellowish red (5YR 4/6) masses of oxidized iron on faces of peds; slightly acid; clear smooth boundary.
- 2Bt3—25 to 37 inches; reddish brown (5YR 4/4) sandy loam; weak fine and medium subangular blocky structure; common very fine roots; few patchy prominent grayish brown (10YR 5/2) clay films on surfaces along pores and few discontinuous faint reddish brown (5YR 4/4) clay bridges on all faces of peds; common medium distinct dark reddish gray (5YR 4/2) masses of reduced iron on faces of peds and common medium distinct reddish brown (5YR 4/6) masses of oxidized iron on faces of peds; slightly acid; clear wavy boundary.
- 2Bt4—37 to 45 inches; reddish brown (5YR 4/4) sandy loam; weak fine and medium subangular blocky structure; friable; few very fine roots; few patchy prominent grayish brown (10YR 5/2) clay films on surfaces along pores and common discontinuous faint reddish brown (5YR 4/4) clay bridges on all faces of peds; common medium faint reddish brown (5YR 5/6) masses of oxidized iron on faces of peds and common medium faint reddish brown (5YR 5/2) masses of reduced iron on faces of peds; 2 percent gravel; slightly acid; clear wavy boundary.
- 2C—45 to 80 inches; reddish brown (5YR 4/3) loamy sand; weak fine and medium subangular blocky structure; friable; few very fine roots; few patchy distinct reddish gray (5YR 5/2) clay films on all faces of peds; few medium faint reddish brown (5YR 5/2) masses of reduced iron on faces of peds and few medium distinct yellowish red (5YR 5/6) masses of oxidized iron on faces of peds; 2 percent gravel; slightly acid.

Pelissier Series

The Pelissier series consists of very deep, excessively drained soils on outwash plains, outwash terraces, eskers, kames, and moraines. These soils formed in gravelly and sandy outwash deposits. Permeability is moderately rapid in the loamy

mantle and very rapid in the sandy and gravelly outwash. Slopes range from 1 to 50 percent.

Typical pedon of Pelissier gravelly sandy loam, 600 feet south and 1,800 feet west of the northeast corner of sec. 4, T. 48 N., R. 27 W., Marquette County, Michigan:

- Oa—0 to 2 inches; black (10YR 2/1), well decomposed leaf litter; moderate fine granular structure; very friable; many very fine to coarse roots; extremely acid; abrupt smooth boundary.
- E—2 to 6 inches; brown (7.5YR 5/2) gravelly sandy loam, pinkish gray (7.5YR 6/2) dry; weak fine subangular blocky structure; friable; common very fine to coarse roots; about 20 percent gravel and 5 percent cobbles; extremely acid; clear wavy boundary.
- Bs1—6 to 10 inches; dark reddish brown (5YR 3/4) gravelly sandy loam; weak medium subangular blocky structure; friable; many very fine to coarse roots; about 20 percent gravel and 5 percent cobbles; very strongly acid; gradual irregular boundary.
- Bs2—10 to 21 inches; yellowish red (5YR 4/6) very gravelly loamy coarse sand; weak fine subangular blocky structure; very friable; common very fine to medium roots; about 35 percent gravel and 5 percent cobbles; strongly acid; gradual wavy boundary.
- C1—21 to 36 inches; strong brown (7.5YR 5/6) very gravelly coarse sand; single grain; loose; common very fine to medium roots; about 50 percent gravel and 5 percent cobbles; strongly acid; gradual wavy boundary.
- C2—36 to 80 inches; reddish yellow (7.5YR 6/6) extremely gravelly coarse sand; single grain; loose; few very fine and fine roots; about 50 percent gravel and 10 percent cobbles; strongly acid.

Pelkie Series

The Pelkie series consists of very deep, moderately well drained soils on flood plains. These soils formed in sandy alluvium. Permeability is rapid. Slopes range from 0 to 8 percent.

Typical pedon of Pelkie loamy very fine sand, 1,056 feet west of the southeast corner of sec. 28, T. 51 N., R. 34 W., Baraga Township, Baraga County, Michigan:

- Ap—0 to 8 inches; brown (7.5YR 5/4) loamy very fine sand, light brown (7.5YR 6/4) dry; weak fine subangular blocky structure parting to weak fine granular; very friable; many fine and medium roots; strongly acid; abrupt smooth boundary.
- C1—8 to 16 inches; light reddish brown (5YR 6/3) fine sand; weak fine subangular blocky structure parting to weak medium granular; very friable; common fine roots; strongly acid; abrupt smooth boundary.
- C2—16 to 32 inches; reddish brown (5YR 5/4) fine sand; weak fine subangular blocky structure parting to weak medium granular; very friable; common fine roots; strongly acid; abrupt smooth boundary.
- C3—32 to 60 inches; light reddish brown (5YR 6/4) sand; common yellowish red (5YR 5/6) masses of oxidized iron; single grain; loose; few fine roots; very strongly acid.

Pence Series

The Pence series consists of very deep, somewhat excessively drained soils on outwash terraces and outwash plains. These soils formed in a loamy mantle over sandy outwash. Permeability is moderately rapid in the loamy upper part of the profile and rapid or very rapid in the lower part. Slopes range from 0 to 35 percent.

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Typical pedon of Pence fine sandy loam, 100 feet north and 2,300 feet east of the southwest corner of sec. 1, T. 47 N., R. 28 W., Ely Township, Marquette County, Michigan:

- Oe—0 to 2 inches; black (10YR 2/1), partially decomposed forest litter; very strongly acid; abrupt smooth boundary.
- E—2 to 6 inches; brown (7.5YR 4/2) fine sandy loam, pinkish gray (7.5YR 6/2) dry; weak medium subangular blocky structure; friable; many very fine to coarse roots; about 2 percent gravel; very strongly acid; abrupt wavy boundary.
- Bs1—6 to 9 inches; dark brown (7.5YR 3/4) fine sandy loam; weak medium subangular blocky structure; friable; common fine to coarse roots; about 5 percent gravel; strongly acid; clear broken boundary.
- Bs2—9 to 13 inches; brown (7.5YR 4/4) fine sandy loam; weak medium subangular blocky structure; friable; common fine roots; about 5 percent gravel; strongly acid; clear wavy boundary.
- 2Bs3—13 to 16 inches; strong brown (7.5YR 4/6) loamy coarse sand; weak fine subangular blocky structure; very friable; common fine roots; about 5 percent gravel; strongly acid; clear wavy boundary.
- 2BC—16 to 31 inches; dark yellowish brown (10YR 4/6) coarse sand; single grain; loose; few fine roots; about 6 percent gravel; strongly acid; clear smooth boundary.
- 2C—31 to 80 inches; dark yellowish brown (10YR 4/4) and yellowish brown (10YR 5/4), stratified coarse sand, sand, very gravelly sand, and very gravelly coarse sand; single grain; loose; about 30 percent gravel; moderately acid.

Peshekee Series

The Peshekee series consists of shallow, well drained soils on rocky knolls, hills, and ridges. These soils formed in eolian deposits and/or loamy till 10 to 20 inches thick over igneous or metamorphic bedrock. Permeability is moderate. Slopes range from 3 to 75 percent.

Typical pedon of Peshekee cobbly silt loam, 50 feet north and 150 feet east of the southwest corner of sec. 13, T. 48 N., R. 31 W., Spurr Township, Baraga County, Michigan:

- Oe—0 to 1 inch; black (10YR 2/1), partially decomposed leaf litter; weak fine granular structure; friable; many roots; about 25 percent cobbles; strongly acid; abrupt smooth boundary.
- A—1 to 4 inches; dark brown (7.5YR 3/2) cobbly silt loam; moderate fine granular structure; friable; many roots; about 25 percent cobbles; moderately acid; abrupt smooth boundary.
- E—4 to 6 inches; brown (7.5YR 4/2) cobbly silt loam; moderate fine subangular blocky structure; friable; many roots; about 25 percent cobbles; strongly acid; abrupt broken boundary.
- Bhs—6 to 9 inches; dark reddish brown (5YR 3/3) cobbly silt loam; weak fine and medium subangular blocky structure; friable; many roots; about 15 percent cobbles; strongly acid; abrupt broken boundary.
- Bs1—9 to 14 inches; strong brown (7.5YR 4/6) cobbly silt loam; weak fine and medium subangular blocky structure; friable; common roots; about 10 percent cobbles and 10 percent gravel; moderately acid; abrupt wavy boundary.
- Bs2—14 to 19 inches; brown (7.5YR 4/4) cobbly fine sandy loam; moderate fine and medium subangular blocky structure; friable; common roots; about 20 percent cobbles and 15 percent gravel; moderately acid; abrupt smooth boundary.
- 2R—19 inches; igneous bedrock.

Pleine Series

The Pleine series consists of very deep, poorly drained, moderately permeable soils in depressions and drainageways on bedrock-controlled moraines. These soils formed in loamy till. Slopes range from 0 to 2 percent.

Typical pedon of Pleine very cobbly muck, 2,370 feet south and 2,565 feet west of the northeast corner of sec. 29, T. 47 N., R. 27 W., Tilden Township, Marquette County, Michigan:

- Oa—0 to 9 inches; black (N 2.5/) very cobbly muck; moderate fine granular structure; very friable; many very fine to coarse roots; about 35 percent cobbles and 15 percent stones; slightly acid; abrupt wavy boundary.
- Bg—9 to 20 inches; pinkish gray (7.5YR 6/2) very fine sandy loam; weak medium subangular blocky structure; firm; common fine distinct strong brown (7.5YR 5/6) masses of oxidized iron; about 10 percent cobbles and 2 percent gravel; slightly acid; clear wavy boundary.
- Bw—20 to 33 inches; reddish brown (5YR 4/4) fine sandy loam; weak medium subangular blocky structure; friable; common medium prominent pinkish gray (7.5YR 6/2) masses of reduced iron; common medium distinct strong brown (7.5YR 5/6) masses of oxidized iron; about 8 percent gravel and 4 percent cobbles; slightly acid; clear wavy boundary.
- C—33 to 80 inches; reddish brown (2.5YR 4/4) gravelly sandy loam; massive; friable; about 18 percent gravel, 6 percent cobbles, and 2 percent stones; slightly acid.

Porkies Series

The Porkies series consists of very deep, well drained soils on bedrock-controlled ground moraines and end moraines. These soils formed in loamy-skeletal till. They have fragic properties. Permeability is moderate in the upper part of the profile, very slow in the fragic layer, and moderate or moderately rapid in the lower part of the profile. Slopes range from 15 to 70 percent.

Typical pedon of Porkies very gravelly silt loam, 940 feet north and 2,480 feet east of the southwest corner of sec. 29, T. 50 N., R. 44 W., Carp Lake Township, Ontonagon County, Michigan:

- Oi—0 to 1 inch; loose leaf litter and twigs; abrupt smooth boundary.
- A—1 to 3 inches; dark reddish brown (5YR 3/2) very gravelly silt loam; moderate medium subangular blocky structure; friable; many fine to very coarse roots; about 20 percent gravel, 5 percent cobbles, 5 percent channers, 5 percent flagstones, 5 percent stones, and 5 percent boulders; extremely acid; abrupt smooth boundary.
- E—3 to 4 inches; reddish brown (5YR 4/3) very gravelly fine sandy loam, reddish gray (5YR 5/2) dry; moderate medium subangular blocky structure; friable; many fine to coarse roots; about 20 percent gravel, 5 percent cobbles, 5 percent channers, 5 percent flagstones, 5 percent stones, and 5 percent boulders; very strongly acid; clear broken boundary.
- Bhs—4 to 7 inches; dark reddish brown (5YR 3/2) very gravelly fine sandy loam; moderate medium subangular blocky structure; friable; many fine to coarse roots; about 20 percent gravel, 5 percent cobbles, 5 percent channers, 5 percent flagstones, 5 percent stones, and 5 percent boulders; strongly acid; clear wavy boundary.
- Bs1—7 to 31 inches; reddish brown (5YR 4/4) very gravelly sandy loam; moderate medium and coarse subangular blocky structure; friable; many fine to coarse roots; about 20 percent gravel, 5 percent cobbles, 5 percent channers, 5 percent

flagstones, 5 percent stones, and 5 percent boulders; strongly acid; gradual wavy boundary.

Bs2—31 to 40 inches; reddish brown (5YR 4/4) very bouldery sandy loam; moderate medium and coarse subangular blocky structure; friable; many fine and medium roots; about 20 percent gravel, 2 percent channers, 20 percent stones, and 15 percent boulders; moderately acid; few lenses of reddish brown (5YR 4/4) very fine sandy loam and dark reddish brown (5YR 3/3) fine sandy loam $\frac{1}{2}$ inch to $1\frac{1}{4}$ inches thick; clear wavy boundary.

Bt—40 to 50 inches; reddish brown (5YR 4/4) very bouldery sandy loam; moderate fine and medium subangular blocky structure; friable; many fine and medium roots; many discontinuous faint reddish brown (5YR 4/4) clay films on all faces of peds; about 20 percent gravel, 2 percent channers, 20 percent stones, and 15 percent boulders; moderately acid; clear wavy boundary.

Btx—50 to 61 inches; reddish brown (5YR 4/4) bouldery fine sandy loam; weak thick platy structure parting to moderate fine subangular blocky; firm; hard; common medium and coarse roots; common patchy faint reddish brown (5YR 4/4) clay films on all faces of peds; about 10 percent gravel, 5 percent cobbles, 2 percent channers, 2 percent flagstones, 2 percent stones, and 10 percent boulders; strongly acid; abrupt wavy boundary.

E/B—61 to 90 inches; dark reddish brown (2.5YR 3/4) extremely gravelly coarse sand (E) and red (2.5YR 4/6) extremely gravelly coarse sandy loam (Bt); single grain; loose; common fine and medium roots; common patchy faint clay bridging between sand grains; about 40 percent gravel, 10 percent cobbles, 10 percent stones, and 5 percent boulders; slightly acid.

Richter Series

The Richter series consists of very deep, somewhat poorly drained soils on lake plains and outwash plains and in glacial drainageways. These soils formed in stratified loamy and sandy glaciofluvial material. Permeability is moderate. Slopes range from 0 to 6 percent.

Typical pedon of Richter fine sandy loam, 500 feet south and 580 feet east of the northwest corner of sec. 30, T. 50 N., R. 40 W., Rockland Township, Ontonagon County, Michigan:

Oi—0 to 1 inch; slightly decomposed plant material.

A—1 to 4 inches; black (7.5YR 2.5/1) fine sandy loam; moderate medium granular structure; many very fine to coarse roots; strongly acid; abrupt smooth boundary.

E—4 to 6 inches; brown (7.5YR 5/4) loamy fine sand and fine sandy loam; moderate medium subangular blocky structure; common very fine to coarse roots; few fine faint strong brown (7.5YR 5/8) masses of oxidized iron; 1 percent gravel; moderately acid; clear smooth boundary.

Bs—6 to 10 inches; brown (7.5YR 4/4) fine sandy loam; moderate medium subangular blocky structure; common very fine to medium roots; common medium faint strong brown (7.5YR 5/8) masses of oxidized iron; 1 percent gravel; moderately acid; clear wavy boundary.

B/E—10 to 18 inches; 70 percent reddish brown (5YR 4/4) sandy loam and 30 percent brown (7.5YR 4/4) loamy sand; weak medium subangular blocky structure; common very fine to medium roots; few patchy faint reddish brown (5YR 4/3) clay films on all faces of peds; common coarse prominent strong brown (7.5YR 5/8) masses of oxidized iron; 1 percent gravel; slightly acid; clear smooth boundary.

BC—18 to 35 inches; stratified, 50 percent reddish brown (5YR 4/4) fine sand, 30 percent reddish brown (5YR 4/4) loamy very fine sand, and 20 percent brown

- (7.5YR 4/4) silt; weak very thick platy structure parting to weak coarse subangular blocky; very slight effervescence; neutral; abrupt smooth boundary.
- C—35 to 80 inches; reddish brown (5YR 4/3), stratified very fine sand, sandy loam, silt loam, and silt; weak very thick platy structure; slight effervescence; neutral.

Robago Series

The Robago series consists of very deep, somewhat poorly drained soils on lake plains. These soils formed in lacustrine deposits. Permeability is moderate. Slopes range from 0 to 3 percent.

Typical pedon of Robago very fine sandy loam, 40 feet north and 115 feet east of the southwest corner of sec. 11, T. 47 N., R. 39 W., Haight Township, Ontonagon County, Michigan:

- A—0 to 6 inches; very dark grayish brown (10YR 3/2) very fine sandy loam; moderate medium granular structure; very friable; many very fine to very coarse roots; moderately acid; abrupt smooth boundary.
- Eg—6 to 9 inches; brown (7.5YR 4/2) very fine sandy loam; weak fine subangular blocky structure; very friable; many very fine to very coarse roots; few fine prominent strong brown (7.5YR 4/6) masses of oxidized iron; strongly acid; clear wavy boundary.
- Bs—9 to 15 inches; brown (7.5YR 5/4) sandy loam; weak medium subangular blocky structure; very friable; common medium to very coarse roots; common fine prominent strong brown (7.5YR 4/6) masses of oxidized iron and common fine prominent brown (10YR 5/3) masses of reduced iron; strongly acid; clear wavy boundary.
- B/E—15 to 22 inches; 80 percent reddish brown (5YR 4/4), stratified sandy loam, very fine sandy loam, and clay loam and 20 percent brown (7.5YR 5/3), stratified loamy sand, loamy fine sand, and sandy loam; weak coarse subangular blocky structure; friable; common very fine and fine roots; many faint reddish brown (5YR 4/3) clay films on all faces of peds; common medium prominent grayish brown (10YR 5/2) masses of reduced iron and common medium prominent yellowish red (5YR 5/6) masses of oxidized iron; moderately acid; gradual wavy boundary.
- Bt—22 to 39 inches; reddish brown (5YR 4/4), stratified sandy loam, fine sandy loam, very fine sandy loam, silty clay loam, and clay loam; weak coarse subangular blocky structure; friable; few very fine roots; common faint reddish brown (5YR 4/3) clay films on all faces of peds; common medium prominent grayish brown (10YR 5/2) masses of reduced iron and common medium prominent yellowish red (5YR 5/6) masses of oxidized iron; slightly acid; gradual smooth boundary.
- C—39 to 80 inches; reddish brown (5YR 5/4), stratified sandy loam, fine sandy loam, and very fine sandy loam; massive; friable; few medium prominent yellowish red (5YR 4/6) masses of oxidized iron; moderately acid.

Rockland Series

The Rockland series consists of well drained soils on slopes of stream valleys and in dissected areas on ground moraines. These soils formed in loamy colluvium from rotational landslides. Permeability is moderate in the upper part of the profile and moderately slow in the lower part. Slopes range from 18 to 70 percent.

Typical pedon of Rockland silt loam, 1,000 feet north and 1,600 feet east of the southwest corner of sec. 20, T. 50 N., R. 39 W., Rockland Township, Ontonagon County, Michigan:

- Oi—0 to 1 inch; loose leaf litter and twigs.
- A—1 to 5 inches; dark brown (7.5YR 3/2) silt loam; moderate medium and coarse granular structure; friable; many very fine to coarse roots; strongly acid; abrupt smooth boundary.
- C1—5 to 23 inches; dark reddish brown (5YR 3/4) silt loam; weak coarse prismatic structure parting to moderate medium subangular blocky; friable; common very fine to coarse roots; few patchy faint dark reddish brown (5YR 3/4) clay films in pores; about 5 percent gravel; moderately acid; gradual smooth boundary.
- C2—23 to 51 inches; dark reddish brown (5YR 3/4) silt loam; weak thick platy structure; friable; few fine and medium roots; few patchy distinct yellowish red (5YR 4/6) clay films on all faces of peds; about 5 percent gravel; slight effervescence; slightly alkaline; gradual smooth boundary.
- C3—51 to 70 inches; dark reddish brown (5YR 3/4) silt loam; weak coarse subangular blocky structure; friable; very few fine and medium roots; very few patchy distinct yellowish red (5YR 4/6) clay films in pores; few medium distinct yellowish red (5YR 5/6) masses of oxidized iron; about 5 percent gravel and 1 percent cobbles; slight effervescence; moderately alkaline; gradual wavy boundary.
- C4—70 to 80 inches; dark reddish brown (5YR 3/4) silt loam; massive; friable; common coarse prominent yellowish red (5YR 5/8) masses of oxidized iron; about 5 percent buried branches, leaf litter, and moss; about 5 percent gravel and 1 percent cobbles; noneffervescent; moderately alkaline.

Sarana Series

The Sarona series consists of very deep, well drained soils on moraines and drumlins. These soils formed in loamy till. Permeability is moderate or moderately rapid. Slopes range from 1 to 50 percent.

The Sarona soils in this survey area are taxadjuncts because they have isotopic mineralogy. This difference, however, does not significantly affect the use and management of the soils.

Typical pedon of Sarona fine sandy loam, 400 feet south and 2,540 feet west of the northeast corner of sec. 10, T. 46 N., R. 38 W., Interior Township, Ontonagon County, Michigan:

- A—0 to 3 inches; dark reddish brown (5YR 3/2) fine sandy loam; weak very fine and fine granular structure; very friable; many very fine to coarse roots; 2 percent cobbles and 5 percent gravel; extremely acid; clear smooth boundary.
- E—3 to 6 inches; dark reddish gray (5YR 4/2) fine sandy loam; weak fine subangular blocky structure; very friable; many very fine to coarse roots; 2 percent cobbles and 5 percent gravel; extremely acid; clear wavy boundary.
- Bs1—6 to 14 inches; reddish brown (5YR 4/4) fine sandy loam; weak fine and medium subangular blocky structure; very friable; many very fine to coarse roots; 1 percent cobbles and 8 percent gravel; extremely acid; clear wavy boundary.
- Bs2—14 to 21 inches; reddish brown (5YR 4/4) loamy sand; weak fine and medium subangular blocky structure; friable; common very fine to medium roots; 5 percent gravel; extremely acid; clear smooth boundary.
- Bs3—21 to 28 inches; yellowish red (5YR 4/6) sandy loam; weak fine and medium subangular blocky structure parting to weak thin platy; friable; common very fine and fine roots; 3 percent gravel; very strongly acid; clear smooth boundary.
- B/E—28 to 47 inches; 60 percent reddish brown (5YR 4/4) sandy loam and 40 percent reddish brown (5YR 5/3) loamy sand; weak medium angular blocky structure parting to weak thin platy; firm; few fine and medium roots; few

- discontinuous faint reddish brown (5YR 4/4) clay films on all faces of peds; 3 percent gravel; very strongly acid; brittle in places; gradual smooth boundary.
- BC—47 to 75 inches; reddish brown (5YR 4/4) sandy loam; weak coarse angular blocky structure parting to weak thin platy; firm; few discontinuous distinct yellowish red (5YR 5/6) silt coatings on all faces of peds; 1 percent gravel and 1 percent cobbles; very strongly acid; gradual wavy boundary.
- Cd—75 to 90 inches; reddish brown (5YR 4/4) sandy loam; massive; common continuous distinct reddish brown (5YR 5/4) silt coatings on all faces of peds; many coarse prominent strong brown (7.5YR 4/6) masses of oxidized iron; 1 percent gravel and 1 percent cobbles; very strongly acid; firm in place.

Sarwet Series

The Sarwet series consists of very deep, moderately well drained soils on moraines and drumlins. These soils formed in loamy till. Permeability is moderate or moderately rapid. Slopes range from 0 to 6 percent.

Typical pedon of Sarwet fine sandy loam, 2,025 feet north and 310 feet west of the southeast corner of sec. 23, T. 45 N., R. 42 W., Marenisco Township, Gogebic County, Michigan:

- Oi—0 to 2 inches; black (10YR 2/1), slightly decomposed forest litter; many very fine to very coarse roots; extremely acid; clear wavy boundary.
- Oa—2 to 3 inches; black (10YR 2/1), highly decomposed forest litter; weak medium granular structure; very friable; many very fine to very coarse roots; very strongly acid; clear broken boundary.
- E—3 to 7 inches; brown (7.5YR 5/2) fine sandy loam; weak medium subangular blocky structure; very friable; many very fine to very coarse roots; about 2 percent gravel; strongly acid; clear wavy boundary.
- Bhs—7 to 14 inches; dark brown (7.5YR 3/3) fine sandy loam; weak medium subangular blocky structure; friable; common very fine to coarse roots; about 2 percent gravel; strongly acid; gradual wavy boundary.
- Bs—14 to 22 inches; dark brown (7.5YR 3/4) fine sandy loam; weak medium subangular blocky structure; friable; common very fine to coarse roots; common yellowish red (5YR 5/8 and 4/6) masses of oxidized iron; about 2 percent gravel; strongly acid; gradual wavy boundary.
- E/B—22 to 28 inches; brown (7.5YR 5/4) loamy sand (E); occupies about 80 percent of the horizon surrounding isolated remnants of dark reddish gray (5YR 4/2) fine sandy loam (Bt); weak medium subangular blocky structure; friable; few very fine to medium roots; few red (2.5YR 4/6) clay films on faces of peds; common yellowish red (5YR 5/8 and 4/6) masses of oxidized iron; about 2 percent gravel; moderately acid; gradual wavy boundary.
- B/E—28 to 38 inches; yellowish red (5YR 4/6) fine sandy loam (Bt); occupies about 55 percent of the horizon surrounding isolated remnants of brown (7.5YR 5/4) loamy sand (E); weak medium subangular blocky structure; firm; few red (2.5YR 4/6) clay films on faces of peds; common yellowish red (5YR 5/8 and 4/6) masses of oxidized iron; about 2 percent gravel; moderately acid; clear wavy boundary.
- C1—38 to 47 inches; reddish brown (5YR 4/4) fine sand; moderate coarse subangular blocky structure; firm; few yellowish red (5YR 5/8 and 4/6) masses of oxidized iron; about 4 percent gravel; moderately acid; abrupt wavy boundary.
- 2C2—47 to 50 inches; dark reddish brown (2.5YR 3/4) sandy clay loam; moderate medium subangular blocky structure; firm; few reddish brown (5YR 5/4) and yellowish red (5YR 4/6) masses of oxidized iron; about 6 percent gravel; slightly acid; abrupt wavy boundary.

3C3—50 to 80 inches; reddish brown (5YR 4/3) loamy sand; weak medium subangular blocky structure; very friable; about 6 percent gravel; strongly acid.

Schaat Creek Series

The Schaat Creek series consists of poorly drained soils on flood plains. These soils formed in clayey alluvium. Permeability is very slow. Slopes range from 0 to 2 percent.

Typical pedon of Schaat Creek silt loam, 200 feet south and 300 feet east of the northwest corner of sec. 7, T. 48 N., R. 41 W., Matchwood Township, Ontonagon County, Michigan:

- Ap—0 to 5 inches; very dark brown (7.5YR 2.5/3) silt loam, dark reddish gray (7.5YR 3/2) dry; moderate medium granular structure; friable; many very fine to medium roots; about 1 percent gravel; strongly acid; abrupt smooth boundary.
- Bw—5 to 10 inches; brown (7.5YR 4/3) silt loam; weak medium subangular blocky structure parting to moderate coarse granular; friable; many very fine to medium roots; few distinct discontinuous brown (7.5YR 5/3) silt coatings on faces of peds; few medium distinct strong brown (7.5YR 5/6) masses of oxidized iron; about 2 percent gravel; strongly acid; clear wavy boundary.
- Bt1—10 to 19 inches; brown (7.5YR 5/3) silty clay loam; moderate coarse subangular blocky structure parting to moderate medium subangular blocky; firm; many fine and common medium roots; few faint patchy brown (7.5YR 5/4) clay films on faces of peds; common faint discontinuous brown (7.5YR 5/3) silt coatings on faces of peds; common medium distinct strong brown (7.5YR 5/6) and common coarse prominent strong brown (7.5YR 5/8) masses of oxidized iron; about 2 percent gravel; strongly acid; clear wavy boundary.
- Bt2—19 to 43 inches; brown (7.5YR 5/3) silty clay loam and sandy clay loam; moderate coarse subangular blocky structure parting to moderate medium subangular blocky; firm; few fine and medium roots; few faint patchy brown (7.5YR 5/4) clay films on faces of peds; very few prominent discontinuous dark brown (7.5YR 3/2) organic stains in the matrix; common medium distinct strong brown (7.5YR 5/6) masses of oxidized iron; about 2 percent gravel; neutral; clear wavy boundary.
- BCg—43 to 54 inches; brown (7.5YR 5/2) clay loam; weak coarse subangular blocky structure; firm; few fine roots; common medium prominent strong brown (7.5YR 5/6) masses of oxidized iron; about 2 percent cobbles and 3 percent gravel; slightly effervescent; moderately alkaline; clear wavy boundary.
- C—54 to 80 inches; reddish brown (5YR 4/3) silt loam; massive; very firm; about 2 percent cobbles and 3 percent gravel; violently effervescent; very strongly alkaline.

Schweitzer Series

The Schweitzer series consists of very deep, well drained soils on ground moraines and bedrock-controlled moraines. These soils are shallow to moderately deep to a fragipan. They formed in silty and loamy eolian deposits over loamy and sandy till. Permeability is moderate in the upper part of the profile, very slow in the fragipan, and moderate in the lower part of the profile. Slopes range from 6 to 75 percent.

Typical pedon of Schweitzer cobbly very fine sandy loam, 2,200 feet north and 2,450 feet west of the southeast corner of sec. 12, T. 47 N., R. 27 W., Negaunee Township, Marquette County, Michigan:

- A—0 to 1 inch; black (5YR 2.5/1) cobbly very fine sandy loam, dark gray (5YR 4/1) dry; weak fine granular structure; very friable; many fine to coarse roots; about 17 percent cobbles, 3 percent stones, and 3 percent boulders; extremely acid; abrupt smooth boundary.
- E—1 to 5 inches; reddish gray (5YR 5/2) cobbly silt loam, pinkish gray (5YR 6/2) dry; moderate medium subangular blocky structure; friable; many fine to coarse roots; about 17 percent cobbles, 3 percent stones, 3 percent boulders, and 2 percent gravel; extremely acid; clear wavy boundary.
- Bhs—5 to 8 inches; dark reddish brown (5YR 3/3) cobbly very fine sandy loam; moderate fine and medium subangular blocky structure; friable; many fine to coarse roots; about 17 percent cobbles, 3 percent stones, 3 percent boulders, and 1 percent gravel; very strongly acid; clear wavy boundary.
- Bs1—8 to 15 inches; dark reddish brown (5YR 3/4) cobbly very fine sandy loam; moderate fine and medium subangular blocky structure; friable; many fine to coarse roots; about 17 percent cobbles, 7 percent gravel, 3 percent stones, and 3 percent boulders; very strongly acid; clear smooth boundary.
- Bs2—15 to 21 inches; brown (7.5YR 4/4) cobbly very fine sandy loam; moderate medium platy structure; friable; common fine and medium roots; about 17 percent cobbles, 3 percent stones, 3 percent boulders, and 1 percent gravel; strongly acid; clear smooth boundary.
- 2(E/B)x—21 to 27 inches; reddish brown (5YR 4/3) very cobbly loamy sand, light reddish brown (5YR 6/3) dry (E); occupies about 70 percent of the horizon surrounding isolated remnants of reddish brown (2.5YR 4/4) very cobbly sandy loam (Bt); common distinct reddish brown (2.5YR 4/4) clay films on faces of peds and in pores; weak very coarse prismatic structure parting to moderate thick platy; very firm; about 24 percent cobbles, 22 percent gravel, 3 percent stones, and 3 percent boulders; strongly acid; clear smooth boundary.
- 2(B/E)x—27 to 43 inches; reddish brown (2.5YR 4/4) very cobbly sandy loam (Bt); occupies about 80 percent of the horizon surrounded by reddish brown (5YR 4/3) very cobbly loamy sand, light reddish brown (5YR 6/3) dry (E); many distinct reddish brown (2.5YR 4/4) clay films on faces of peds and in pores; weak very coarse prismatic structure parting to moderate thick platy; very firm; about 22 percent cobbles, 18 percent gravel, 3 percent stones, and 3 percent boulders; strongly acid; clear smooth boundary.
- 2(B/E)—43 to 61 inches; reddish brown (2.5YR 4/4) very cobbly sandy loam (Bt); occupies about 80 percent of the horizon surrounded by or penetrated by tongues of reddish brown (5YR 4/3) very cobbly loamy sand, light reddish brown (5YR 6/3) dry (E); many distinct reddish brown (2.5YR 4/4) clay films on faces of peds and in pores; moderate thick platy structure; firm; about 24 percent cobbles, 20 percent gravel, 3 percent stones, and 3 percent boulders; strongly acid; clear smooth boundary.
- 2C—61 to 80 inches; reddish brown (2.5YR 4/4) very cobbly loamy sand; massive with weakly expressed thin plates inherent from the parent material; friable; about 24 percent cobbles, 22 percent gravel, 3 percent stones, and 3 percent boulders; moderately acid.

Siskiwit Series

The Siskiwit series consists of very deep, moderately well drained soils on ground moraines and end moraines. These soils formed in sandy deposits. Permeability is moderate or moderately rapid. Slopes range from 0 to 18 percent.

Typical pedon of Siskiwit loamy fine sand, 1,130 feet south and 255 feet west of the northeast corner of sec. 32, T. 49 N., R. 42 W., Bergland Township, Ontonagon County, Michigan:

- Oa—0 to 2 inches; black (5YR 2.5/1), highly decomposed plant material; many very fine to very coarse roots; strongly acid; abrupt wavy boundary.
- E—2 to 8 inches; reddish gray (5YR 5/2) loamy fine sand, pink (5YR 7/3) dry; weak medium subangular blocky structure; very friable; many very fine to very coarse roots; moderately acid; clear wavy boundary.
- Bhs—8 to 11 inches; dark reddish brown (5YR 3/3) loamy fine sand; moderate medium subangular blocky structure; firm; many very fine to very coarse roots; moderately acid; 75 percent moderately cemented ortstein; abrupt irregular boundary.
- Bs1—11 to 16 inches; dark brown (7.5YR 3/4) loamy fine sand; moderate medium subangular blocky structure; firm; common very fine to medium roots; strongly acid; 35 percent weakly and moderately cemented ortstein with tongues extending to a depth of 30 inches; clear irregular boundary.
- Bs2—16 to 28 inches; brown (7.5YR 4/4) loamy fine sand; weak thin platy structure; very friable; common very fine and fine roots; moderately acid; gradual wavy boundary.
- E/B—28 to 34 inches; 60 percent brown (7.5YR 5/4) and 40 percent brown (7.5YR 4/4) loamy sand; weak medium platy structure; very friable; few very fine and fine roots; common fine and very fine vesicular pores; 15 percent medium distinct strong brown (7.5YR 4/6) masses of oxidized iron; moderately acid; gradual wavy boundary.
- B/E—34 to 55 inches; 65 percent brown (7.5YR 5/3) and 35 percent brown (7.5YR 4/4) fine sandy loam, sand, and loamy sand; weak medium platy structure; very friable; few very fine roots; common medium distinct brown (7.5YR 4/2) masses of reduced iron and common medium distinct strong brown (7.5YR 4/6) masses of oxidized iron; moderately acid; clear smooth boundary.
- C—55 to 80 inches; reddish brown (5YR 4/3), stratified gravelly sand, sand, and loamy sand; single grain; loose; 15 percent gravel; moderately acid.

Sporley Series

The Sporley series consists of very deep, well drained soils on dissected moraines and till-floored lake plains. These soils formed in stratified loamy and silty glaciolacustrine deposits. Permeability is moderately slow. Slopes range from 8 to 55 percent.

Typical pedon of Sporley silt loam, 2,415 feet north of the southeast corner of sec. 35, T. 50 N., R. 38 W., Greenland Township, Ontonagon County, Michigan:

- Ap—0 to 6 inches; dark reddish brown (5YR 3/3) silt loam; moderate medium granular structure; friable; many very fine to coarse roots; 2 percent gravel; strongly acid; abrupt smooth boundary.
- E—6 to 7 inches; reddish brown (5YR 5/3) silt loam, pink (5YR 7/3) dry; moderate fine subangular blocky structure; friable; common very fine to coarse roots; strongly acid; abrupt broken boundary.
- Bs—7 to 12 inches; reddish brown (5YR 4/4) silt loam; moderate medium subangular blocky structure; friable; common very fine to coarse roots; moderately acid; occasional ortstein fragments; clear broken boundary.
- E'—12 to 15 inches; reddish brown (5YR 5/3) silt loam, pink (7.5YR 7/3) dry; moderate medium subangular blocky structure; firm; common very fine to medium roots; strongly acid; abrupt wavy boundary.
- E/B—15 to 26 inches; 60 percent reddish brown (5YR 5/3) and 40 percent reddish brown (2.5YR 4/4) silt loam; weak coarse subangular blocky structure; firm; common very fine to medium roots; few prominent reddish brown (2.5YR 4/4)

clay films in root channels and many faint reddish brown (5YR 5/3) silt coatings on faces of peds; strongly acid; clear smooth boundary.

B/E—26 to 30 inches; 70 percent reddish brown (2.5YR 4/4) silty clay loam and 30 percent reddish brown (5YR 5/3) silt loam; weak coarse subangular blocky structure; firm; few fine and medium roots; few prominent reddish brown (2.5YR 4/4) clay films in root channels and 40 percent faint reddish brown (5YR 5/3) silt coatings on faces of peds; strongly acid; abrupt smooth boundary.

BC—30 to 80 inches; reddish brown (5YR 5/3), stratified silt loam, very fine sandy loam, silt, and loamy very fine sand; massive; firm; few fine and medium roots; few distinct yellowish red (5YR 4/6) clay films in root channels in vertical cracks 12 inches apart; moderately acid.

Stambaugh Series

The Stambaugh series consists of very deep, well drained soils on outwash plains and stream terraces. These soils formed in modified silty eolian sediments and in the underlying gravelly sandy deposits. Permeability is moderately slow in the solum and rapid in the substratum. Slopes range from 0 to 25 percent.

Typical pedon of Stambaugh silt loam, about 6 miles west of the village of Alpha; 1,050 feet north of the junction of County Roads 424 and 639; 66 feet west of County Road 639 in the NW¹/₄ sec. 13, T. 42 N., R. 34 W., Iron County, Michigan:

A—0 to 4 inches; very dark gray (10YR 3/1) silt loam, grayish brown (10YR 5/2) dry; moderate fine and medium granular structure; friable; many fine to coarse roots; about 2 percent gravel; moderately acid; abrupt smooth boundary.

Bs1—4 to 10 inches; dark brown (7.5YR 4/4) silt loam; weak fine subangular blocky structure; friable; many fine and medium roots; about 1 percent gravel; common very dark gray (10YR 3/1) wormcasts; moderately acid; clear wavy boundary.

Bs2—10 to 18 inches; brown (7.5YR 5/4) silt loam; weak fine subangular blocky structure; friable; common fine roots; very few very dark gray (10YR 3/1) wormcasts in the upper 3 inches; moderately acid; clear wavy boundary.

E—18 to 22 inches; yellowish brown (10YR 5/4) very fine sandy loam; very weak medium platy structure; firm in place, friable disturbed; few fine roots; very thin coatings of light yellowish brown (10YR 6/4) very fine sand between plates; common very fine discontinuous pores; moderately acid; abrupt irregular boundary.

B/E—22 to 39 inches; reddish brown (5YR 4/4) silt loam (Bt); common fine pores; few clay films, mainly in pores; few coatings of very fine sand along primary peds; occupying about 70 percent of the horizon surrounded by brown (7.5YR 5/4) silt loam (E); common fine faint strong brown (7.5YR 5/6) mottles; very weak thick platy structure parting to moderate medium angular blocky; firm; few fine roots; about 2 percent gravel; moderately acid; abrupt smooth boundary.

2C1—39 to 50 inches; dark brown (7.5YR 4/4) very gravelly sand; single grain; loose; few very fine roots; about 35 percent gravel; moderately acid; abrupt smooth boundary.

2C2—50 to 80 inches; reddish brown (5YR 4/4) gravelly sand; single grain; loose; about 30 percent gravel and cobbles; moderately acid.

Stutts Series

The Stutts series consists of very deep, somewhat excessively drained soils on outwash plains, lake plains, and deltas. These soils formed in sandy glaciofluvial or glaciolacustrine deposits. Permeability is moderately rapid in the loamy part and rapid in the lower part. Slopes range from 0 to 55 percent.

Soil Survey of Gogebic County, Michigan

Typical pedon of Stutts loamy fine sand, 2,375 feet north and 1,750 feet west of the southeast corner of sec. 8, T. 46 N., R. 38 W., Interior Township, Ontonagon County, Michigan:

- Oe—0 to 1 inch; very dark gray (7.5YR 3/1), moderately decomposed plant material; many very fine to coarse roots; very strongly acid; clear irregular boundary.
- AE—1 to 3 inches; dark brown (7.5YR 3/2) loamy fine sand; weak fine subangular blocky structure; very friable; many very fine to coarse roots; 1 percent gravel; extremely acid; clear smooth boundary.
- E—3 to 6 inches; brown (7.5YR 4/2) loamy fine sand; weak fine subangular blocky structure; very friable; many very fine to coarse roots; 1 percent gravel; extremely acid; clear irregular boundary.
- Bhs—6 to 9 inches; dark reddish brown (5YR 3/3) loamy fine sand; weak fine and medium subangular blocky structure; friable; common coarse roots and many very fine to medium roots; 1 percent gravel; extremely acid; 20 percent moderately cemented ortstein; abrupt broken boundary.
- Bs1—9 to 15 inches; dark brown (7.5YR 3/4) loamy fine sand; weak fine and medium subangular blocky structure; very friable; common very fine to coarse roots; 2 percent gravel; extremely acid; 15 percent moderately cemented ortstein; gradual irregular boundary.
- Bs2—15 to 26 inches; brown (7.5YR 5/4) fine sand; weak medium subangular blocky structure; very friable; common very fine to medium roots; 3 percent gravel; very strongly acid; 15 percent moderately cemented ortstein; gradual wavy boundary.
- BC—26 to 42 inches; brown (7.5YR 5/4) fine sand; weak medium subangular blocky structure parting to weak thin platy; very friable; few very fine and fine roots; 3 percent gravel; very strongly acid; 10 percent moderately cemented ortstein; gradual wavy boundary.
- C1—42 to 72 inches; yellowish brown (10YR 5/4) fine sand; weak thick platy structure; loose; few very fine and fine roots; 1 percent gravel; very strongly acid; 2 percent moderately cemented ortstein; few thin bands of brown (7.5YR 4/3) loamy fine sand; clear smooth boundary.
- 2C2—72 to 80 inches; brown (7.5YR 4/3) very fine sandy loam; single grain; loose; very strongly acid.

Tawas Series

The Tawas series consists of very deep, very poorly drained organic soils in depressions within shore complexes and on outwash plains, lake plains, and moraines. These soils formed in sapric material 16 to 51 inches thick over sandy deposits. Permeability is moderately slow to moderately rapid in the organic material and rapid in the sandy material. Slopes range from 0 to 2 percent.

Typical pedon of Tawas muck, 770 feet north and 340 feet east of the southwest corner of sec. 6, T. 51 N., R. 40 W., Ontonagon Township, Ontonagon County, Michigan:

- Oa1—0 to 7 inches; muck, black (10YR 2/1) broken face and black (10YR 2/1) rubbed; weak medium granular structure; friable; common very fine to coarse roots; moderately acid; clear smooth boundary.
- Oa2—7 to 22 inches; muck, black (10YR 2/1) broken face and very dark gray (10YR 3/1) rubbed; weak fine subangular blocky structure; friable; common very fine to coarse roots; strongly acid; clear wavy boundary.
- C1—22 to 30 inches; brown (10YR 4/3) sand; single grain; loose; few patchy prominent dark reddish brown (5YR 3/4) organic stains on surfaces along root channels; few coarse prominent yellowish red (5YR 5/6) masses of oxidized iron

and common coarse prominent yellowish red (5YR 4/6) masses of oxidized iron; moderately acid; clear wavy boundary.

C2—30 to 42 inches; brown (10YR 4/3) sand; common fine distinct brown (7.5YR 4/4) mottles; single grain; loose; few fine prominent yellowish red (5YR 4/6) masses of oxidized iron; 5 percent gravel; strongly acid; clear wavy boundary.

C3—42 to 80 inches; brown (10YR 4/3) gravelly sand; single grain; loose; 20 percent gravel; strongly acid.

Tonkey Series

The Tonkey series consists of very deep, poorly drained soils on lake plains and outwash plains. These soils formed in stratified loamy and sandy glaciofluvial deposits. Permeability is moderate. Slopes range from 0 to 2 percent.

The Tonkey soil in map unit 8075 (MLRA 93) is a taxadjunct because it has redder color within a depth of 30 inches from the mineral soil surface. Also, the activity class is active. The Tonkey soil in map unit 8122A (MLRA 92) has a lower pH in the C horizon than is described as the range for the series. These differences, however, do not significantly affect the use and management of the soils.

Typical pedon of Tonkey silt loam, 820 feet south and 1,575 feet east of the northwest corner of sec. 10, T. 48 N., R. 45 W.; NAD 83, UTM Easting 276172m, Northing 5162200m:

A1—0 to 5 inches; black (5YR 2.5/1) silt loam; strong coarse granular structure; very friable; many coarse and common fine and very fine roots; neutral; abrupt wavy boundary.

A2—5 to 9 inches; very dark brown (10YR 3/), stratified silt loam to fine sandy loam to loamy fine sand; weak thick platy structure parting to weak fine granular; friable; common medium, fine, and very fine roots; 10 percent fine prominent strong brown (7.5YR 5/6) and 1 percent coarse prominent reddish gray (5YR 5/2) masses of oxidized iron; neutral; abrupt wavy boundary.

Bw—9 to 15 inches; reddish brown (5YR 4/4), stratified sandy loam to fine sandy loam; weak thin platy structure; friable; common medium roots; 10 percent medium prominent faint yellowish red (5YR 4/6) masses of oxidized iron in the matrix; neutral; abrupt wavy boundary.

Bg—15 to 28 inches; gray (5YR 6/1), stratified sandy loam to fine sandy loam; weak thin platy structure; friable; 30 percent medium prominent reddish yellow (7.5YR 6/8) masses of oxidized iron and 1 percent coarse prominent strong brown (7.5YR 5/8) masses of oxidized iron in the matrix and 1 percent fine prominent gray (5GY 4/) areas of iron depletion lining pores; slightly alkaline; abrupt wavy boundary.

B'w—28 to 38 inches; reddish brown (5YR 4/4), stratified silt loam to loam; moderate medium subangular blocky structure; friable; 10 percent fine prominent reddish yellow (5YR 6/8) masses of oxidized iron lining pores and 10 percent fine prominent pinkish gray (5YR 6/2) areas of iron depletion lining pores; slightly alkaline; abrupt wavy boundary.

BC—38 to 60 inches; reddish brown (5YR 4/3) sandy loam; massive; 10 percent fine prominent and faint black (5YR 2.5/1) manganese masses in the matrix; slightly alkaline; abrupt wavy boundary.

Cg—60 to 80 inches; greenish gray (5G 5/) sandy loam and reddish brown silt loam; weak thick platy structure; friable; slight effervescence; moderately alkaline.

Trap Falls Series

The Trap Falls series consists of very deep, poorly drained soils on ground moraines. These soils formed in loamy till. Permeability is moderate in the upper part of the solum and moderately slow in the lower part of the solum and in the substratum. Slopes are 0 to 1 percent.

Typical pedon of Trap Falls silt loam, 430 feet south and 340 feet east of the northwest corner of sec. 5, T. 50 N., R. 39 W., Rockland Township, Ontonagon County, Michigan:

- Oi—0 to 1 inch; slightly decomposed leaf litter and twigs.
- A—1 to 10 inches; very dark gray (5YR 3/1) silt loam, dark reddish gray (5YR 4/2) dry; moderate medium granular structure; friable; many very fine to coarse roots; about 2 percent gravel; neutral; clear wavy boundary.
- Bt1—10 to 18 inches; reddish brown (2.5YR 4/4) silty clay loam; weak medium angular blocky structure; friable; many very fine to medium and few coarse roots; common faint reddish brown (2.5YR 4/4) clay films on faces of peds; common fine distinct red (2.5YR 4/6 and 5/6) masses of oxidized iron; common very fine prominent reddish gray (5YR 5/2) masses of reduced iron; about 2 percent gravel; moderately alkaline; clear wavy boundary.
- Bt2—18 to 31 inches; reddish brown (2.5YR 4/4) silty clay loam; weak medium angular blocky structure; friable; few very fine to medium roots; many faint reddish brown (2.5YR 4/4) clay films on faces of peds; common fine distinct red (2.5YR 4/6) masses of oxidized iron; common medium prominent very pale brown (10YR 7/3) carbonate masses; about 2 percent gravel; slightly effervescent; strongly alkaline; clear wavy boundary.
- Cd1—31 to 55 inches; reddish brown (2.5YR 4/4) silt loam; moderate thick platy structure; firm; common fine roots; common discontinuous faint reddish brown (5YR 4/4) clay films on all faces of peds; common medium prominent very pale brown (10YR 7/3) carbonate masses; about 2 percent gravel; strongly effervescent; moderately alkaline; clear smooth boundary.
- Cd2—55 to 80 inches; reddish brown (2.5YR 4/4) loam; massive; friable; about 7 percent gravel; very strongly alkaline.

Tula Series

The Tula series consists of very deep, somewhat poorly drained soils on ground moraines and end moraines. These soils formed in modified loamy eolian material and in the underlying loamy till. They are shallow or moderately deep to a fragipan. Permeability is moderate in the upper part of the profile, very slow in the fragipan, and moderate in the lower part of the profile. Slopes range from 0 to 4 percent.

Typical pedon of Tula cobbly very fine sandy loam, 2,525 feet south and 2,340 feet west of the northeast corner of sec. 29, T. 47 N., R. 27 W., Tilden Township, Marquette County, Michigan:

- Oa—0 to 1 inch; black (5YR 2.5/1), well decomposed forest litter; weak fine granular structure; very friable; many very fine to coarse roots; about 2 percent stones; strongly acid; abrupt wavy boundary.
- A—1 to 5 inches; dark reddish gray (5YR 4/2) cobbly very fine sandy loam, light brownish gray (10YR 6/2) dry; weak medium platy structure; friable; common very fine to coarse roots; about 20 percent cobbles and 10 percent gravel; strongly acid; clear wavy boundary.

- E—5 to 8 inches; light gray (5YR 7/1) cobbly very fine sandy loam, white (5YR 8/1) dry; moderate medium platy structure; friable; common very fine to coarse roots; common medium distinct gray (5YR 5/1) masses of reduced iron; common medium distinct reddish brown (5YR 5/4) masses of oxidized iron; about 20 percent cobbles and 10 percent gravel; moderately acid; gradual irregular boundary.
- Bs1—8 to 20 inches; reddish brown (5YR 4/4) cobbly very fine sandy loam; moderate thin platy structure; friable; common very fine to coarse roots; few distinct yellowish red (5YR 5/8) masses of oxidized iron; about 20 percent cobbles and 10 percent gravel; moderately acid; clear irregular boundary.
- Bs2—20 to 28 inches; dark reddish brown (5YR 3/4) gravelly sandy loam; weak medium subangular blocky structure; friable; common very fine to medium roots; about 12 percent gravel, 6 percent cobbles, and 5 percent stones; moderately acid; clear wavy boundary.
- 2(E/B)x—28 to 37 inches; light reddish brown (5YR 6/3) gravelly sandy loam, pinkish gray (5YR 7/2) dry (E); occupies about 60 percent of the horizon surrounding isolated remnants of reddish brown (5YR 4/3) gravelly sandy loam (Bt); few fine distinct clay films on faces of peds; weak very coarse prismatic structure parting to weak thin platy; very firm; few very fine and fine roots in cracks 10 to 20 inches apart; common fine vesicular pores; few fine distinct yellowish red (5YR 5/8) masses of oxidized iron; about 12 percent gravel, 6 percent cobbles, and 5 percent stones; moderately acid; gradual wavy boundary.
- 2(B/E)x—37 to 62 inches; dark reddish brown (2.5YR 3/4) gravelly loam (Bt); common fine distinct clay films on faces of peds; occupies about 60 percent of the horizon surrounding peds of reddish brown (5YR 5/4) gravelly sandy loam, pink (7.5YR 7/3) dry (E); weak very coarse prismatic structure parting to weak thin platy; very firm; few fine distinct yellowish red (5YR 5/8) masses of oxidized iron; about 12 percent gravel, 6 percent cobbles, and 5 percent stones; moderately acid; gradual wavy boundary.
- 2C—62 to 80 inches; reddish brown (2.5YR 4/4) gravelly sandy loam; massive; friable; about 22 percent gravel, 8 percent cobbles, and 3 percent stones; moderately acid.

Ubly Series

The Ubly series consists of very deep, well drained soils on dissected till plains and moraines. These soils formed in loamy till. Permeability is moderately rapid in the upper part and moderately slow in the lower part. Slopes range from 8 to 70 percent.

Typical pedon of Ubly fine sandy loam, 180 feet north and 685 feet west of the southeast corner of sec. 25, T. 51 N., R. 37 W., Bohemia Township, Ontonagon County, Michigan:

- Oi—0 to 1 inch; slightly decomposed plant material; abrupt smooth boundary.
- A—1 to 4 inches; very dark brown (7.5YR 2.5/2) fine sandy loam, pinkish gray (5YR 6/2) dry; moderate medium granular structure; friable; many very fine to coarse roots; 1 percent gravel; very strongly acid; clear smooth boundary.
- E—4 to 10 inches; reddish gray (5YR 5/2) fine sandy loam, pinkish gray (7.5YR 6/2) dry; moderate medium subangular blocky structure; friable; many very fine to coarse roots; 1 percent gravel; very strongly acid; clear wavy boundary.
- Bhs—10 to 12 inches; dark reddish brown (5YR 3/2) fine sandy loam; moderate fine subangular blocky structure; friable; many very fine to coarse roots; 1 percent gravel; extremely acid; clear broken boundary.

- Bs—12 to 18 inches; dark reddish brown (5YR 3/4) and reddish brown (5YR 4/4) fine sandy loam; moderate medium subangular blocky structure; friable; common very fine to coarse roots; 1 percent gravel; extremely acid; 10 percent ortstein; gradual wavy boundary.
- 2B/E—18 to 29 inches; 60 percent reddish brown (2.5YR 4/4) loam and 40 percent reddish brown (5YR 5/3) fine sandy loam; moderate coarse subangular blocky structure; firm; few fine to coarse roots; common distinct red (2.5YR 4/6) clay films on faces of peds; 3 percent gravel; strongly acid; gradual wavy boundary.
- 2Bt—29 to 44 inches; reddish brown (2.5YR 4/4) loam; moderate coarse subangular blocky structure; firm; few fine to coarse roots; common distinct red (2.5YR 4/6) clay films on faces of peds; 3 percent gravel; slightly acid; gradual wavy boundary.
- 2BCd—44 to 80 inches; reddish brown (2.5YR 4/4) loam; moderate coarse angular blocky structure; very firm; few fine and medium roots; very few distinct light reddish brown (2.5YR 6/4) silt coatings on faces of peds and few faint reddish brown (2.5YR 4/4) clay films on faces of peds; 3 percent gravel; strong effervescence; moderately alkaline.

Vilas Series

The Vilas series consists of very deep, excessively drained soils on outwash plains, outwash terraces, and outwash areas on moraines. These soils formed in sandy deposits. Permeability is rapid. Slopes range from 1 to 18 percent.

Typical pedon of Vilas loamy sand, along the Wisconsin State line, about 3,200 feet south and 2,600 feet west of the northeast corner of sec. 31, T. 44 N., R. 39 W., Watersmeet Township, Gogebic County, Michigan:

- Oa—0 to 2 inches; black (7.5YR 2.5/1), well decomposed forest litter; weak fine granular structure; very friable; many very fine to coarse roots; very strongly acid; abrupt smooth boundary.
- E—2 to 4 inches; reddish gray (5YR 5/2) loamy sand; weak fine subangular blocky structure; very friable; common very fine to coarse roots; about 1 percent gravel; very strongly acid; abrupt wavy boundary.
- Bs1—4 to 7 inches; dark reddish brown (5YR 3/4) loamy sand; weak fine subangular blocky structure; very friable; common very fine to very coarse roots; about 1 percent gravel; very strongly acid; clear wavy boundary.
- Bs2—7 to 15 inches; yellowish red (5YR 4/6) loamy sand; weak medium subangular blocky structure; very friable; few very fine to coarse roots; about 1 percent gravel; very strongly acid; clear wavy boundary.
- Bs3—15 to 20 inches; yellowish red (5YR 5/8) coarse sand; weak medium subangular blocky structure; very friable; few very fine to coarse roots; about 5 percent gravel; strongly acid; clear wavy boundary.
- BC—20 to 33 inches; yellowish red (5YR 5/6) sand; single grain; loose; few very fine and fine roots; about 1 percent gravel; moderately acid; gradual wavy boundary.
- C—33 to 80 inches; pink (7.5YR 7/4) coarse sand; single grain; loose; about 1 percent gravel; moderately acid.

Wabeno Series

The Wabeno series consists of moderately well drained soils on drumlins and moraines. These soils are moderately deep to a fragipan. They formed in loess and in the underlying loamy and sandy till or glacial mudflow sediment. Permeability is moderate in the loess, slow in the fragipan, and moderate or moderately rapid below the fragipan. Slopes range from 1 to 18 percent.

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Typical pedon of Wabeno silt loam, very stony, about 3 miles east and 0.5 mile south of Tipler; 600 feet west and 1,100 feet north of the southeast corner of sec. 26, T. 40 N., R. 15 E.; USGS Long Lake NE, Wisconsin-Michigan, topographic quadrangle; lat. 45 degrees 54 minutes 50 seconds N. and long. 88 degrees 34 minutes 25 seconds W., Florence County, Wisconsin:

- Oa—0 to 3 inches; black (10YR 2/1) muck (sapric material, which is a mat of partially decomposed forest litter); about 20 percent fiber, 5 percent rubbed; weak fine granular structure; very friable; many fine and few medium roots; strongly acid; abrupt wavy boundary.
- E—3 to 5 inches; brown (10YR 5/3) silt loam, pink (7.5YR 7/3) dry; weak thin platy structure; friable; many fine and few medium roots; about 1 percent gravel and 5 percent cobbles; strongly acid; clear broken boundary.
- Bs—5 to 11 inches; brown (7.5YR 4/4) silt loam; moderate medium subangular blocky structure; friable; many fine and few medium roots; about 1 percent gravel and 5 percent cobbles; very strongly acid; clear wavy boundary.
- E'—11 to 15 inches; brown (10YR 5/3) silt, very pale brown (10YR 7/3) dry; moderate thin platy structure; friable; common fine and medium roots; about 1 percent gravel and 5 percent cobbles; strongly acid; clear wavy boundary.
- B/E—15 to 24 inches; about 65 percent dark brown (7.5YR 3/4) silt loam (Bt); moderate fine subangular and angular blocky structure; friable; few distinct reddish brown (5YR 4/4) clay films on faces of peds; penetrated by tongues of brown (10YR 5/3) silt loam (E), very pale brown (10YR 7/3) dry; moderate fine subangular blocky structure; friable; common fine and medium roots; few fine and medium prominent yellowish red (5YR 5/6) masses of iron accumulation; about 1 percent gravel and 5 percent cobbles; strongly acid; clear wavy boundary.
- 2Btx1—24 to 29 inches; dark brown (7.5YR 3/4) gravelly sandy loam; strong coarse prismatic structure parting to moderate fine and medium subangular and angular blocky; firm; few fine roots; few prominent yellowish red (5YR 4/6) clay films on faces of some peds and in some pores; common very fine vesicular pores; brittle; about 15 percent gravel and 5 percent cobbles; strongly acid; gradual irregular boundary.
- 2Btx2—29 to 55 inches; dark brown (7.5YR 3/4) gravelly sandy loam with strata of brown (7.5YR 4/4) gravelly loamy sand and sand $\frac{1}{2}$ inch to $1\frac{1}{2}$ inches thick; moderate coarse prismatic structure; firm; breaks to strong medium plates along depositional strata; common very fine vesicular pores; few prominent yellowish red (5YR 4/6) clay films on faces of peds; about 16 percent gravel and 5 percent cobbles; brittle; strongly acid; gradual irregular boundary.
- 2C—55 to 80 inches; dark brown (7.5YR 3/4) gravelly sandy loam with strata of brown (7.5YR 4/4) gravelly loamy sand and sand $\frac{1}{2}$ inch to $1\frac{1}{2}$ inches thick; massive; friable; common very fine vesicular pores in the sandy loam; about 15 percent gravel and 5 percent cobbles; moderately acid.

Wainola Series

The Wainola series consists of very deep, somewhat poorly drained soils on outwash plains, lake plains, and glacial lake deltas. These soils formed in fine sandy glaciofluvial deposits. Permeability is rapid. Slopes range from 0 to 4 percent.

Typical pedon of Wainola fine sand, 475 feet south and 290 feet west of the northeast corner of sec. 16, T. 49 N., R. 38 W., Stannard Township, Ontonagon County, Michigan:

- Oa—0 to 3 inches; black (7.5YR 2.5/1), highly decomposed plant material; many very fine and fine roots; extremely acid; abrupt wavy boundary.

- E—3 to 10 inches; variegated, 50 percent brown (7.5YR 5/3) and 50 percent pinkish gray (7.5YR 6/2) fine sand; weak medium subangular blocky structure; very friable; many very fine to medium roots; common medium faint brown (7.5YR 5/3) masses of oxidized iron throughout; extremely acid; abrupt wavy boundary.
- Bhs—10 to 12 inches; dark reddish brown (5YR 3/3) fine sand; weak thick platy structure parting to weak fine subangular blocky; very friable; common very fine to medium roots; few fine prominent strong brown (7.5YR 4/6) masses of oxidized iron throughout; 75 percent moderately cemented dark reddish brown (5YR 3/2 and 3/3) ortstein nodules throughout; 35 percent ortstein fragments; very strongly acid; fragments of ortstein in tongues extending to a depth of 20 inches; abrupt broken boundary.
- Bs1—12 to 20 inches; dark brown (7.5YR 3/4) fine sand; weak fine subangular blocky structure; very friable; few fine and medium roots; common medium distinct strong brown (7.5YR 4/6) masses of oxidized iron throughout; 20 percent moderately cemented dark brown (7.5YR 3/4 and 3/3) ortstein nodules; 10 percent ortstein fragments; very strongly acid; fragments of ortstein in tongues extending to a depth of 24 inches; clear irregular boundary.
- Bs2—20 to 26 inches; brown (7.5YR 4/4) fine sand; weak medium subangular blocky structure; very friable; few very fine roots; common medium faint brown (7.5YR 4/3) masses of reduced iron and common medium faint strong brown (7.5YR 4/6) masses of oxidized iron throughout; 22 percent ortstein fragments; very strongly acid; gradual wavy boundary.
- BC—26 to 32 inches; brown (7.5YR 5/4) fine sand; weak medium subangular blocky structure; very friable; common fine distinct strong brown (7.5YR 5/6) masses of oxidized iron and common medium faint brown (7.5YR 5/3) masses of reduced iron throughout; strongly acid; clear smooth boundary.
- C—32 to 80 inches; brown (7.5YR 5/3), stratified fine sand, very fine sand, and loamy fine sand; single grain; loose; common medium faint brown (7.5YR 5/2) masses of reduced iron throughout; moderately acid.

Waiska Series

The Waiska series consists of excessively drained soils on glacial lake benches, stream terraces, and outwash plains. These soils formed in gravelly and sandy material. Permeability is very rapid. Slopes range from 0 to 60 percent.

Typical pedon of Waiska sand, on a convex slope of 5 percent in a forested area, 2,475 feet south and 165 feet east of the northwest corner of sec. 33, T. 51 N., R. 31 W., Arvon Township, Baraga County, Michigan:

- Oe—0 to 1 inch; dark reddish brown (5YR 2/2), partially decomposed leaf litter; weak fine granular structure; very friable; many roots; strongly acid; abrupt smooth boundary.
- E—1 to 4 inches; brown (7.5YR 4/2) sand; weak fine granular structure; very friable; many roots; about 5 percent gravel; strongly acid; abrupt smooth boundary.
- Bhs—4 to 8 inches; dark reddish brown (5YR 3/3) gravelly sand; weak fine subangular blocky structure parting to single grain; very friable to loose; many roots; about 15 percent gravel; strongly acid; abrupt smooth boundary.
- Bs1—8 to 11 inches; brown (7.5YR 4/4) gravelly sand; single grain; loose; common roots; about 20 percent gravel; strongly acid; clear smooth boundary.
- Bs2—11 to 18 inches; strong brown (7.5YR 4/6) very gravelly sand; single grain; loose; few roots; about 50 percent gravel; strongly acid; gradual smooth boundary.
- BC—18 to 35 inches; strong brown (7.5YR 5/6) very gravelly sand; single grain; loose; few roots; about 50 percent gravel; strongly acid; clear smooth boundary.

C—35 to 60 inches; yellowish brown (10YR 5/4) and dark yellowish brown (10YR 4/4) very gravelly sand with strata of coarse sand; single grain; loose; about 50 percent gravel; strongly acid.

Wakefield Series

The Wakefield series consists of moderately well drained soils on till plains. These soils formed in modified loamy eolian deposits and in the underlying loamy till. They have a fragipan. Permeability is moderate above the fragipan, very slow in the fragipan, and moderate below the fragipan. Slopes range from 1 to 35 percent.

Typical pedon of Wakefield loam, 2,585 feet south and 215 feet west of the northeast corner of sec. 30, T. 48 N., R. 47 W., Ironwood Township, Gogebic County, Michigan:

- Oi—0 to 1 inch; undecomposed hardwood and conifer litter; abrupt wavy boundary.
- A—1 to 4 inches; very dark brown (7.5YR 2.5/2) loam; moderate medium granular structure; friable; common very fine to coarse roots; about 1 percent cobbles and 3 percent gravel; very strongly acid; abrupt irregular boundary.
- E—4 to 7 inches; brown (7.5YR 4/2) silt loam; moderate fine angular blocky structure; friable; common very fine to coarse roots; about 1 percent cobbles and 3 percent gravel; very strongly acid; abrupt broken boundary.
- Bhs—7 to 10 inches; dark brown (7.5YR 3/2) loam; moderate medium subangular blocky structure; friable; common very fine to coarse roots; about 1 percent cobbles and 3 percent gravel; very strongly acid; clear wavy boundary.
- Bs—10 to 16 inches; dark brown (7.5YR 3/3) fine sandy loam; moderate medium subangular blocky structure; friable; common very fine to coarse roots; about 1 percent cobbles and 3 percent gravel; very strongly acid; abrupt wavy boundary.
- 2E/Bx—16 to 26 inches; 70 percent weak red (2.5YR 5/2) fine sandy loam (E); surrounding reddish brown (2.5YR 4/4) loam (Bt); moderate medium platy structure; very firm; common fine roots; about 1 percent cobbles and 3 percent gravel; common brown (7.5YR 4/6) masses of oxidized iron; strongly acid; diffuse irregular boundary.
- 2B/Ex—26 to 54 inches; 60 percent reddish brown (2.5YR 4/4) silt loam (Bt) surrounded by weak red (2.5YR 5/2) fine sandy loam (E); weak thick platy structure parting to moderate medium angular blocky; firm; common fine roots; few reddish brown (2.5YR 4/4) clay films; about 1 percent cobbles and 6 percent gravel; strongly acid; clear wavy boundary.
- 2BC—54 to 70 inches; dark reddish brown (2.5YR 3/4) fine sandy loam; moderate medium platy structure parting to moderate fine subangular blocky; friable; about 2 percent cobbles and 3 percent gravel; strongly acid; abrupt wavy boundary.
- 2C—70 to 80 inches; dark reddish brown (2.5YR 3/4) fine sandy loam; weak medium platy structure; firm; 2 percent cobbles and 3 percent gravel; moderately acid.

Witbeck Series

The Witbeck series consists of very deep, poorly drained soils on ground moraines and end moraines. These soils formed in loamy deposits. Permeability is moderate or moderately slow. Slopes range from 0 to 2 percent.

Typical pedon of Witbeck muck, very stony, about 6 miles west of Nestoria and 1½ mile south of U.S. 41; 2,375 feet south and 1,300 feet west of the northeast corner of sec. 7, T. 48 N., R. 32 W., Baraga County, Michigan:

- Oa—0 to 6 inches; black (5YR 2/1) muck; weak medium granular structure; very friable; many roots; about 5 percent cobbles; strongly acid; abrupt smooth boundary.
- A—6 to 10 inches; black (10YR 2/1) silt loam, dark gray (10YR 4/1) dry; moderate medium and coarse granular structure; very friable; many roots; about 5 percent cobbles; moderately acid; abrupt smooth boundary.
- Bg—10 to 22 inches; gray (5Y 5/1) fine sandy loam; few medium distinct olive (5Y 5/3) and common medium prominent yellowish brown (10YR 5/6) masses of iron accumulation; weak fine subangular blocky structure; firm; few roots; about 10 percent gravel and 4 percent cobbles; moderately acid; clear wavy boundary.
- Cg1—22 to 30 inches; dark gray (5Y 4/1) very fine sandy loam; many fine and medium prominent dark yellowish brown (10YR 4/4) and common medium prominent dark brown (10YR 3/3) masses of iron accumulation; massive; firm; about 10 percent gravel and 4 percent cobbles; slightly acid; clear wavy boundary.
- Cg2—30 to 39 inches; brown (10YR 5/3) very fine sandy loam; many medium prominent strong brown (7.5YR 5/6) masses of iron accumulation; massive; firm; about 10 percent gravel and 4 percent cobbles; slightly acid; clear wavy boundary.
- Cg3—39 to 80 inches; dark gray (N 4/) gravelly fine sandy loam; few fine distinct olive (5Y 4/4) mottles; massive; friable; about 20 percent gravel and 5 percent cobbles; slightly acid.

Wormet Series

The Wormet series consists of very deep, somewhat poorly drained soils on outwash terraces and outwash plains. These soils are shallow to sandy outwash. They formed in a thin mantle of loamy alluvium or loamy eolian deposits or both and in the underlying stratified sandy outwash. Permeability is moderate or moderately rapid in the loamy mantle and rapid or very rapid in the sandy outwash. Slopes range from 0 to 3 percent.

Typical pedon of Wormet sandy loam, about 3 miles north and 1 mile west of Manitowish Waters; 260 feet south and 2,100 feet west of the northeast corner of sec. 30, T. 43 N., R. 5 E., Vilas County, Wisconsin:

- Oe—0 to 1 inch; black (N 2/) mucky peat (hemic material, which is a mat of partially decomposed forest litter); about 50 percent fiber, 25 percent rubbed; weak thin platy structure; very friable; many fine roots; very strongly acid; abrupt wavy boundary.
- A—1 to 2 inches; very dark grayish brown (10YR 3/2) sandy loam, grayish brown (10YR 5/2) dry; weak fine granular structure; very friable; many fine roots; about 1 percent gravel; very strongly acid; abrupt wavy boundary.
- E—2 to 6 inches; reddish gray (5YR 5/2) sandy loam, light gray (5YR 7/1) dry; weak fine subangular blocky structure; friable; common fine and medium roots; about 2 percent gravel; very strongly acid; clear smooth boundary.
- Bhs—6 to 8 inches; dark reddish brown (5YR 3/3) sandy loam; weak very fine subangular blocky structure; friable; common fine and medium roots; about 2 percent gravel; very strongly acid; abrupt wavy boundary.
- Bs1—8 to 15 inches; reddish brown (5YR 4/4) sandy loam; weak fine subangular blocky structure; friable; common fine and medium roots; about 2 percent gravel; moderately acid; clear wavy boundary.
- Bs2—15 to 19 inches; reddish brown (5YR 4/4) sandy loam; weak medium subangular blocky structure; friable; few fine roots; common fine distinct yellowish

red (5YR 5/8) masses of iron accumulation; about 8 percent gravel; moderately acid; clear wavy boundary.

2C—19 to 80 inches; brown (7.5YR 4/4), stratified sand, gravelly sand, and very gravelly sand; single grain; loose; few medium distinct pinkish gray (7.5YR 6/2) iron depletions and common medium distinct strong brown (7.5YR 5/8) masses of iron accumulation; about 25 percent gravel; slightly acid.

Zandi Series

The Zandi series consists of very deep, well drained soils on lake plains, till plains, and stream terraces. These soils formed in stratified loamy and sandy deposits. Permeability is moderate. Slopes range from 1 to 35 percent.

Typical pedon of Zandi fine sandy loam, 1,345 feet west of the northeast corner of sec. 34, T. 53 N., R. 37 W., Bohemia Township, Ontonagon County, Michigan:

- Oe—0 to 0.5 inch; black (7.5YR 2.5/1), slightly decomposed plant material; friable; many very fine to coarse roots; slightly acid; abrupt wavy boundary.
- E—0.5 inch to 4 inches; brown (7.5YR 4/2) fine sandy loam; weak fine subangular blocky structure parting to weak very fine granular; very friable; many very fine to coarse roots; about 1 percent gravel; strongly acid; clear wavy boundary.
- Bs1—4 to 6 inches; brown (7.5YR 4/3) loamy very fine sand; weak fine and medium subangular blocky structure; very friable; many very fine to coarse roots; about 1 percent gravel; strongly acid; clear wavy boundary.
- Bs2—6 to 9 inches; brown (7.5YR 4/4) very fine sandy loam; weak medium subangular blocky structure parting to weak medium granular; very friable; many very fine to coarse roots; about 1 percent gravel; strongly acid; clear wavy boundary.
- Bs3—9 to 14 inches; strong brown (7.5YR 4/6) very fine sandy loam; weak fine and medium subangular blocky structure; very friable; many very fine to coarse roots; about 1 percent gravel; very strongly acid; clear wavy boundary.
- Bs4—14 to 34 inches; brown (7.5YR 5/4) very fine sandy loam; weak fine and medium subangular blocky structure; very friable; many very fine to coarse roots; about 1 percent gravel; very strongly acid; clear wavy boundary.
- E/B—34 to 42 inches; brown (7.5YR 5/3) and pinkish gray (7.5YR 6/2), stratified very fine sand, loamy very fine sand, very fine sandy loam, and silt loam; weak medium and coarse angular blocky structure parting to weak medium platy; friable; few very fine and fine roots; very strongly acid; gradual wavy boundary.
- B/E—42 to 57 inches; brown (7.5YR 5/4) and light brown (7.5YR 6/3), stratified very fine sand, loamy very fine sand, very fine sandy loam, and silt loam; weak medium and coarse angular blocky structure parting to weak medium platy; friable; few very fine roots; very strongly acid; gradual wavy boundary.
- E and Bt—57 to 80 inches; brown (7.5YR 5/3) and reddish brown (5YR 5/4), stratified very fine sand, loamy very fine sand, very fine sandy loam, and silt loam; massive; friable; few very fine roots; very few brown (7.5YR 4/4) clay bridges on horizontal faces of peds; very strongly acid.

Factors of Soil Formation

Soil forms through the interaction of five major factors. These are the physical, chemical, and mineral composition of the parent material; the climate under which the soil material has accumulated and has existed since accumulation; the plant and animal life on and in the soil; the relief, or topography; and the length of time that the processes of soil formation have acted on the parent material (Jenny, 1941).

Climate and plant and animal life are the active forces of soil formation. They slowly change the parent material into a natural body of soil that has genetically related layers, called horizons. The effects of climate and plant and animal life are conditioned by relief. The nature of the parent material affects the kind of soil profile that is formed and in extreme cases determines it almost entirely. Finally, time changes the parent material into a soil. Generally, a long time is required for the formation of distinct horizons.

The factors of soil formation are so closely interrelated in their effects on the soil that few generalizations can be made about the effect of any one factor unless conditions are specified for the others. Many of the processes of soil formation are unknown.

Climate

Climate is important in the formation of soils. It determines the kind of plant and animal life on and in the soil and determines the amount of water available for the weathering of minerals and the transporting of soil materials. Through its influence on soil temperature, climate determines the rate of chemical reactions in the soil. These climatic influences generally affect areas larger than a county. The climate in Gogebic County is cool and humid. Presumably, it is similar to the climate under which the soils formed. The soils in Gogebic County differ from soils that formed in a dry, warm climate or from those that formed in a moist, hot climate. Climate is uniform throughout the county, but its effect is modified locally by the proximity to Lake Superior. The minor differences in the soils in Gogebic County are partially the result of climatic differences.

Living Organisms

Green plants have been the principal organisms influencing the soils in the survey area. Bacteria, fungi, earthworms, and humans also have been important. The chief contribution of plant and animal life is the addition of organic matter and nitrogen to the soil. The kind of organic material on and in the soil depends on the kind of plants that grew on the soil. The residue of these plants accumulates on the surface of the soil. It decays and eventually becomes organic matter. Plant roots provide channels for the downward movement of water through the soil and add organic matter to the soil as they decay. Bacteria in the soil help to break down the organic matter into a form that can be used by plants.

The native vegetation in the survey area was coniferous and deciduous forest. Differences in natural soil drainage and changes in parent material affect the

composition of forests. In general, the excessively drained upland soils were covered with white pine and red pine. The very poorly drained soils were covered with cedar and black spruce. Some of the wetland areas were predominantly covered by grasses and sedges.

Topography

Topography, or relief, has had a marked influence on the formation of the soils in the survey area through its effect on natural drainage, erosion, plant cover, and soil temperature. In this survey area, slopes range from 0 to 75 percent. Natural drainage ranges from excessively drained on hilltops to very poorly drained in swamps.

Relief influences the formation of soils by affecting runoff and drainage. Drainage in turn, through its effect on aeration of the soil, determines the color of the soil. Runoff is most rapid on the steeper slopes, but in low areas, water can be temporarily ponded.

Water and air move easily through well drained soils but move slowly through very poorly drained soils. In soils that are well aerated, the iron and aluminum compounds that give most soils their color are brightly colored and are oxidized. Poorly aerated soils are dull gray and mottled.

Parent Material

Parent material is the unconsolidated mass in which a soil forms. Nearly all the parent material of the soils in Gogebic County was deposited by glaciers or by glacial meltwaters. Some of the material was subsequently reworked by water and wind. Parent material determines the chemical and mineralogical composition of the soil. Although most of the soils in the county have parent material of common glacial origin, the properties of the parent material may vary, sometimes within a small area, depending on how the material was deposited. The dominant parent materials in Gogebic County are till, outwash, eolian material, lacustrine or glaciolacustrine deposits, alluvium, and organic material. Descriptions of the different parent materials are provided in the Glossary.

Time

Generally, a long time is required for the development of distinct horizons in a soil. The differences in the length of time that the parent material has been in place are commonly reflected in the degree of development of the soil profile. Some soils form rapidly; others form slowly. The glacial deposits in the survey area in which the soils formed have been exposed to soil-forming factors long enough for the development of distinct horizons.

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Glossary

Many of the terms relating to landforms, geology, and geomorphology are defined in more detail in the "National Soil Survey Handbook" (available in local offices of the Natural Resources Conservation Service or on the Internet).

ABC soil. A soil having an A, a B, and a C horizon.

Ablation till. Loose, relatively permeable earthy material deposited during the downwasting of nearly static glacial ice, either contained within or accumulated on the surface of the glacier.

AC soil. A soil having only an A and a C horizon. Commonly, such soil formed in recent alluvium or on steep, rocky slopes.

Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alluvial cone. A semiconical type of alluvial fan having very steep slopes. It is higher, narrower, and steeper than a fan and is composed of coarser and thicker layers of material deposited by a combination of alluvial episodes and (to a much lesser degree) landslides (debris flow). The coarsest materials tend to be concentrated at the apex of the cone.

Alluvial fan. A low, outspread mass of loose materials and/or rock material, commonly with gentle slopes. It is shaped like an open fan or a segment of a cone. The material was deposited by a stream at the place where it issues from a narrow mountain valley or upland valley or where a tributary stream is near or at its junction with the main stream. The fan is steepest near its apex, which points upstream, and slopes gently and convexly outward (downstream) with a gradual decrease in gradient.

Alluvium. Unconsolidated material, such as gravel, sand, silt, clay, and various mixtures of these, deposited on land by running water.

Alpha,alpha-dipyridyl. A compound that when dissolved in ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction implies reducing conditions and the likely presence of redoximorphic features.

Animal unit month (AUM). The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

Aquic conditions. Current soil wetness characterized by saturation, reduction, and redoximorphic features.

Argillic horizon. A subsoil horizon characterized by an accumulation of illuvial clay.

Aspect. The direction toward which a slope faces. Also called slope aspect.

Association, soil. A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.

Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the

difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3
Low	3 to 6
Moderate	6 to 9
High	9 to 12
Very high	more than 12

Backslope. The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.

Backswamp. A flood-plain landform. Extensive, marshy or swampy, depressed areas of flood plains between natural levees and valley sides or terraces.

Basal area. The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet.

Base saturation. The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.

Base slope (geomorphology). A geomorphic component of hills consisting of the concave to linear (perpendicular to the contour) slope that, regardless of the lateral shape, forms an apron or wedge at the bottom of a hillside dominated by colluvium and slope-wash sediments (for example, slope alluvium).

Bedding plane. A planar or nearly planar bedding surface that visibly separates each successive layer of stratified sediment or rock (of the same or different lithology) from the preceding or following layer; a plane of deposition. It commonly marks a change in the circumstances of deposition and may show a parting, a color difference, a change in particle size, or various combinations of these. The term is commonly applied to any bedding surface, even one that is conspicuously bent or deformed by folding.

Bedding system. A drainage system made by plowing, grading, or otherwise shaping the surface of a flat field. It consists of a series of low ridges separated by shallow, parallel dead furrows.

Bedrock. The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

Bedrock-controlled topography. A landscape where the configuration and relief of the landforms are determined or strongly influenced by the underlying bedrock.

Bench terrace. A raised, level or nearly level strip of earth constructed on or nearly on a contour, supported by a barrier of rocks or similar material, and designed to make the soil suitable for tillage and to prevent accelerated erosion.

Bisequum. Two sequences of soil horizons, each of which consists of an illuvial horizon and the overlying eluvial horizons.

Bottom land. An informal term loosely applied to various portions of a flood plain.

Boulders. Rock fragments larger than 2 feet (60 centimeters) in diameter.

Breaks. A landscape or tract of steep, rough or broken land dissected by ravines and gullies and marking a sudden change in topography.

Breast height. An average height of 4.5 feet above the ground surface; the point on a tree where diameter measurements are ordinarily taken.

Brush management. Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush

management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.

Cable yarding. A method of moving felled trees to a nearby central area for transport to a processing facility. Most cable yarding systems involve use of a drum, a pole, and wire cables in an arrangement similar to that of a rod and reel used for fishing. To reduce friction and soil disturbance, felled trees generally are reeled in while one end is lifted or the entire log is suspended.

Calcareous soil. A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.

Canopy. The leafy crown of trees or shrubs. (See Crown.)

Capillary water. Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

Catena. A sequence, or "chain," of soils on a landscape that formed in similar kinds of parent material and under similar climatic conditions but that have different characteristics as a result of differences in relief and drainage.

Cation. An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

Cation-exchange capacity. The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

Catsteps. See Terracettes.

Cement rock. Shaly limestone used in the manufacture of cement.

Channery soil material. Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 centimeters) along the longest axis. A single piece is called a chanter.

Chemical treatment. Control of unwanted vegetation through the use of chemicals.

Chiseling. Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.

Clay. As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Clay depletions. See Redoximorphic features.

Clay film. A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

Clayey textures (in map unit descriptions). Equipment use and other uses are limited because of the clayey textures in the surface layer and subsoil.

Claypan. A dense, compact, slowly permeable subsoil layer that contains much more clay than the overlying materials, from which it is separated by a sharply defined boundary. A claypan is commonly hard when dry and plastic and sticky when wet.

Climax plant community. The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.

Coarse textured soil. Sand or loamy sand.

Cobble (or cobblestone). A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.

Cobbly soil material. Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.

COLE (coefficient of linear extensibility). See Linear extensibility.

- Colluvium.** Unconsolidated, unsorted earth material being transported or deposited on side slopes and/or at the base of slopes by mass movement (e.g., direct gravitational action) and by local, unconcentrated runoff.
- Complex slope.** Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.
- Complex, soil.** A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.
- Concretions.** See Redoximorphic features.
- Conglomerate.** A coarse grained, clastic sedimentary rock composed of rounded or subangular rock fragments more than 2 millimeters in diameter. It commonly has a matrix of sand and finer textured material. Conglomerate is the consolidated equivalent of gravel.
- Conservation cropping system.** Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.
- Conservation tillage.** A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.
- Consistence, soil.** Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."
- Contour stripcropping.** Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.
- Control section.** The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.
- Coprogenous earth (sedimentary peat).** A type of limnic layer composed predominantly of fecal material derived from aquatic animals.
- Corrosion (geomorphology).** A process of erosion whereby rocks and soil are removed or worn away by natural chemical processes, especially by the solvent action of running water, but also by other reactions, such as hydrolysis, hydration, carbonation, and oxidation.
- Corrosion (soil survey interpretations).** Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.
- Cover crop.** A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.
- Crop residue management.** Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.
- Cropping system.** Growing crops according to a planned system of rotation and management practices.
- Cross-slope farming.** Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.

- Crown.** The upper part of a tree or shrub, including the living branches and their foliage.
- Cryoturbate.** A mass of soil or other unconsolidated earthy material moved or disturbed by frost action. It is typically coarser than the underlying material.
- Culmination of the mean annual increment (CMAI).** The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.
- Cutbanks caving** (in tables). The walls of excavations tend to cave in or slough.
- Decreasers.** The most heavily grazed climax range plants. Because they are the most palatable, they are the first to be destroyed by overgrazing.
- Deferred grazing.** Postponing grazing or resting grazing land for a prescribed period.
- Delta.** A body of alluvium having a surface that is fan shaped and nearly flat; deposited at or near the mouth of a river or stream where it enters a body of relatively quiet water, generally a sea or lake.
- Dense layer** (in tables). A very firm, massive layer that has a bulk density of more than 1.8 grams per cubic centimeter. Such a layer affects the ease of digging and can affect filling and compacting.
- Depth, soil.** Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.
- Dip slope.** A slope of the land surface, roughly determined by and approximately conforming to the dip of the underlying bedrock.
- Diversion (or diversion terrace).** A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.
- Divided-slope farming.** A form of field stripcropping in which crops are grown in a systematic arrangement of two strips, or bands, across the slope to reduce the hazard of water erosion. One strip is in a close-growing crop that provides protection from erosion, and the other strip is in a crop that provides less protection from erosion. This practice is used where slopes are not long enough to permit a full stripcropping pattern to be used.
- Drainage class** (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained*, *somewhat excessively drained*, *well drained*, *moderately well drained*, *somewhat poorly drained*, *poorly drained*, and *very poorly drained*. These classes are defined in the “Soil Survey Manual.”
- Drainage, surface.** Runoff, or surface flow of water, from an area.
- Drainageway.** A general term for a course or channel along which water moves in draining an area. A term restricted to relatively small, linear depressions that at some time move concentrated water and either do not have a defined channel or have only a small defined channel.
- Drift.** A general term applied to all mineral material (clay, silt, sand, gravel, and boulders) transported by a glacier and deposited directly by or from the ice or transported by running water emanating from a glacier. Drift includes unstratified material (till) that forms moraines and stratified deposits that form outwash plains, eskers, kames, varves, and glaciofluvial sediments. The term is generally applied to Pleistocene glacial deposits in areas that no longer contain glaciers.

- Droughtiness** (in map unit descriptions). The soil holds too little moisture for plants during dry periods.
- Drumlin.** A low, smooth, elongated oval hill, mound, or ridge of compact till that has a core of bedrock or drift. It commonly has a blunt nose facing the direction from which the ice approached and a gentler slope tapering in the other direction. The longer axis is parallel to the general direction of glacier flow. Drumlins are products of streamline (laminar) flow of glaciers, which molded the subglacial floor through a combination of erosion and deposition.
- Duff.** A generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.
- Dune.** A low mound, ridge, bank, or hill of loose, windblown granular material (generally sand), either barren and capable of movement from place to place or covered and stabilized with vegetation but retaining its characteristic shape.
- Earthy fill.** See Mine spoil.
- Ecological site.** An area where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. An ecological site is the product of all the environmental factors responsible for its development. It is typified by an association of species that differ from those on other ecological sites in kind and/or proportion of species or in total production.
- Eluviation.** The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.
- Endosaturation.** A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters are saturated.
- Eolian deposit.** Sand-, silt-, or clay-sized clastic material transported and deposited primarily by wind, commonly in the form of a dune or a sheet of sand or loess.
- Ephemeral stream.** A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no long-continued supply from melting snow or other source, and its channel is above the water table at all times.
- Episaturation.** A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.
- Erosion.** The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.
Erosion (geologic). Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.
Erosion (accelerated). Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.
- Erosion pavement.** A surficial lag concentration or layer of gravel and other rock fragments that remains on the soil surface after sheet or rill erosion or wind has removed the finer soil particles and that tends to protect the underlying soil from further erosion.
- Erosion surface.** A land surface shaped by the action of erosion, especially by running water.
- Escarpment.** A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Most commonly applied to cliffs produced by differential erosion. Synonym: scarp.
- Esker.** A long, narrow, sinuous, steep-sided ridge of stratified sand and gravel deposited as the bed of a stream flowing in an ice tunnel within or below the ice

(subglacial) or between ice walls on top of the ice of a wasting glacier and left behind as high ground when the ice melted. Eskers range in length from less than a kilometer to more than 160 kilometers and in height from 3 to 30 meters.

Extrusive rock. Igneous rock derived from deep-seated molten matter (magma) deposited and cooled on the earth's surface.

Fallow. Cropland left idle in order to restore productivity through accumulation of moisture. Summer fallow is common in regions of limited rainfall where cereal grain is grown. The soil is tilled for at least one growing season for weed control and decomposition of plant residue.

Fan remnant. A general term for landforms that are the remaining parts of older fan landforms, such as alluvial fans, that have been either dissected or partially buried.

Fertility, soil. The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Fibric soil material (peat). The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.

Field moisture capacity. The moisture content of a soil, expressed as a percentage of the oven-dry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity*, *normal moisture capacity*, or *capillary capacity*.

Fill slope. A sloping surface consisting of excavated soil material from a road cut. It commonly is on the downhill side of the road.

Fine textured soil. Sandy clay, silty clay, or clay.

Firebreak. An area cleared of flammable material to stop or help control creeping or running fires. It also serves as a line from which to work and to facilitate the movement of firefighters and equipment. Designated roads also serve as firebreaks.

First bottom. An obsolete, informal term loosely applied to the lowest flood-plain steps that are subject to regular flooding.

Flaggy soil material. Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.

Flagstone. A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.

Flood plain. The nearly level plain that borders a stream and is subject to flooding unless protected artificially.

Flood-plain landforms. A variety of constructional and erosional features produced by stream channel migration and flooding. Examples include backswamps, flood-plain splays, meanders, meander belts, meander scrolls, oxbow lakes, and natural levees.

Flood-plain splay. A fan-shaped deposit or other outspread deposit formed where an overloaded stream breaks through a levee (natural or artificial) and deposits its material (commonly coarse grained) on the flood plain.

Flood-plain step. An essentially flat, terrace-like alluvial surface within a valley that is frequently covered by floodwater from the present stream; any approximately horizontal surface still actively modified by fluvial scour and/or deposition. May occur individually or as a series of steps.

Fluvial. Of or pertaining to rivers or streams; produced by stream or river action.

Foothills. A region of steeply sloping hills that fringes a mountain range or high-plateau escarpment. The hills have relief of as much as 1,000 feet (300 meters).

- Footslope.** The concave surface at the base of a hillslope. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).
- Forb.** Any herbaceous plant not a grass or a sedge.
- Forest cover.** All trees and other woody plants (underbrush) covering the ground in a forest.
- Forest type.** A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.
- Fragipan.** A loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.
- Genesis, soil.** The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.
- Glaciofluvial deposits.** Material moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The deposits are stratified and occur in the form of outwash plains, valley trains, deltas, kames, eskers, and kame terraces.
- Glaciolacustrine deposits.** Material ranging from fine clay to sand derived from glaciers and deposited in glacial lakes mainly by glacial meltwater. Many deposits are bedded or laminated.
- Gleyed soil.** Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.
- Graded stripcropping.** Growing crops in strips that grade toward a protected waterway.
- Grassed waterway.** A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.
- Gravel.** Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.
- Gravelly soil material.** Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.
- Green manure crop** (agronomy). A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.
- Ground water.** Water filling all the unblocked pores of the material below the water table.
- Gully.** A small channel with steep sides caused by erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage; a rill is of lesser depth and can be smoothed over by ordinary tillage.
- Hard bedrock.** Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.
- Hard to reclaim** (in tables). Reclamation is difficult after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.
- Hardpan.** A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.

Head slope (geomorphology). A geomorphic component of hills consisting of a laterally concave area of a hillside, especially at the head of a drainageway. The overland waterflow is converging.

Hemic soil material (mucky peat). Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.

High-residue crops. Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.

Hill. A generic term for an elevated area of the land surface, rising as much as 1,000 feet above surrounding lowlands, commonly of limited summit area and having a well defined outline. Slopes are generally more than 15 percent. The distinction between a hill and a mountain is arbitrary and may depend on local usage.

Hillslope. A generic term for the steeper part of a hill between its summit and the drainage line, valley flat, or depression floor at the base of a hill.

Horizon, soil. A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the "Soil Survey Manual." The major horizons of mineral soil are as follows:

O horizon.—An organic layer of fresh and decaying plant residue.

L horizon.—A layer of organic and mineral limnic materials, including coprogenous earth (sedimentary peat), diatomaceous earth, and marl.

A horizon.—The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

E horizon.—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

B horizon.—The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

C horizon.—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

Cr horizon.—Soft, consolidated bedrock beneath the soil.

R layer.—Consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.

Humus. The well decomposed, more or less stable part of the organic matter in mineral soils.

Hydrologic soil groups. Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

Igneous rock. Rock that was formed by cooling and solidification of magma and that has not been changed appreciably by weathering since its formation. Major varieties include plutonic and volcanic rock (e.g., andesite, basalt, and granite).

Illuviation. The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

Impervious soil. A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

Increasers. Species in the climax vegetation that increase in amount as the more desirable plants are reduced by close grazing. Increasers commonly are the shorter plants and the less palatable to livestock.

Infiltration. The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Infiltration capacity. The maximum rate at which water can infiltrate into a soil under a given set of conditions.

Infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

Intake rate. The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

Less than 0.2	very low
0.2 to 0.4	low
0.4 to 0.75	moderately low
0.75 to 1.25	moderate
1.25 to 1.75	moderately high
1.75 to 2.5	high
More than 2.5	very high

Interfluve. A landform composed of the relatively undissected upland or ridge between two adjacent valleys containing streams flowing in the same general direction. An elevated area between two drainageways that sheds water to those drainageways.

Interfluve (geomorphology). A geomorphic component of hills consisting of the uppermost, comparatively level or gently sloping area of a hill; shoulders of backwearing hillslopes can narrow the upland or can merge, resulting in a strongly convex shape.

Intermittent stream. A stream, or reach of a stream, that does not flow year-round but that is commonly dry for 3 or more months out of 12 and whose channel is generally below the local water table. It flows only during wet periods or when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Invaders. On range, plants that encroach into an area and grow after the climax vegetation has been reduced by grazing. Generally, plants invade following disturbance of the surface.

Iron depletions. See Redoximorphic features.

Irrigation. Application of water to soils to assist in production of crops. Methods of irrigation are:

Basin.—Water is applied rapidly to nearly level plains surrounded by levees or dikes.

Border.—Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes, or borders.

Controlled flooding.—Water is released at intervals from closely spaced field ditches and distributed uniformly over the field.

Corrugation.—Water is applied to small, closely spaced furrows or ditches in fields of close-growing crops or in orchards so that it flows in only one direction.

Drip (or trickle).—Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.

Furrow.—Water is applied in small ditches made by cultivation implements.

Furrows are used for tree and row crops.

Sprinkler.—Water is sprayed over the soil surface through pipes or nozzles from a pressure system.

Subirrigation.—Water is applied in open ditches or tile lines until the water table is raised enough to wet the soil.

Wild flooding.—Water, released at high points, is allowed to flow onto an area without controlled distribution.

Kame. A low mound, knob, hummock, or short irregular ridge composed of stratified sand and gravel deposited by a subglacial stream as a fan or delta at the margin of a melting glacier; by a supraglacial stream in a low place or hole on the surface of the glacier; or as a ponded deposit on the surface or at the margin of stagnant ice.

Karst (topography). A kind of topography that formed in limestone, gypsum, or other soluble rocks by dissolution and that is characterized by closed depressions, sinkholes, caves, and underground drainage.

Knoll. A small, low, rounded hill rising above adjacent landforms.

Ksat. Saturated hydraulic conductivity. (See Permeability.)

Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Lake plain. A nearly level surface marking the floor of an extinct lake filled by well sorted, generally fine textured, stratified deposits, commonly containing varves.

Lake terrace. A narrow shelf, partly cut and partly built, produced along a lakeshore in front of a scarp line of low cliffs and later exposed when the water level falls.

Lamellae. Thin layers in the soil where illuviated clay particles have accumulated. These layers generally form in sandy soils and are commonly irregular or discontinuous.

Landslide. A general, encompassing term for most types of mass movement landforms and processes involving the downslope transport and outward deposition of soil and rock materials caused by gravitational forces; the movement may or may not involve saturated materials. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.

Large stones (in tables). Rock fragments 3 inches (7.6 centimeters) or more across. Large stones adversely affect the specified use of the soil.

Leaching. The removal of soluble material from soil or other material by percolating water.

Linear extensibility. Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at $1/3$ - or $1/10$ -bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

- Liquid limit.** The moisture content at which the soil passes from a plastic to a liquid state.
- Loam.** Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.
- Lodgment till.** A basal till commonly characterized by compact fissile structure and containing stones oriented with their long axes generally parallel to the direction of ice movement.
- Loess.** Material transported and deposited by wind and consisting dominantly of silt-sized particles.
- Low strength.** The soil is not strong enough to support loads.
- Low-residue crops.** Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.
- Marl.** An earthy, unconsolidated deposit consisting chiefly of calcium carbonate mixed with clay in approximately equal proportions; formed primarily under freshwater lacustrine conditions but also formed in more saline environments.
- Mass movement.** A generic term for the dislodgment and downslope transport of soil and rock material as a unit under direct gravitational stress.
- Masses.** See Redoximorphic features.
- Meander belt.** The zone within which migration of a meandering channel occurs; the flood-plain area included between two imaginary lines drawn tangential to the outer bends of active channel loops.
- Meander scar.** A crescent-shaped, concave or linear mark on the face of a bluff or valley wall, produced by the lateral erosion of a meandering stream that impinged upon and undercut the bluff.
- Meander scroll.** One of a series of long, parallel, close-fitting, crescent-shaped ridges and troughs formed along the inner bank of a stream meander as the channel migrated laterally down-valley and toward the outer bank.
- Mechanical treatment.** Use of mechanical equipment for seeding, brush management, and other management practices.
- Medium textured soil.** Very fine sandy loam, loam, silt loam, or silt.
- Metamorphic rock.** Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement at depth in the earth's crust. Nearly all such rocks are crystalline.
- Mine spoil.** An accumulation of displaced earthy material, rock, or other waste material removed during mining or excavation. Also called earthy fill.
- Mineral soil.** Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.
- Minimum tillage.** Only the tillage essential to crop production and prevention of soil damage.
- Miscellaneous area.** A kind of map unit that has little or no natural soil and supports little or no vegetation.
- Moderately coarse textured soil.** Coarse sandy loam, sandy loam, or fine sandy loam.
- Moderately fine textured soil.** Clay loam, sandy clay loam, or silty clay loam.
- Mollic epipedon.** A thick, dark, humus-rich surface horizon (or horizons) that has high base saturation and pedogenic soil structure. It may include the upper part of the subsoil.
- Moraine.** In terms of glacial geology, a mound, ridge, or other topographically distinct accumulation of unsorted, unstratified drift, predominantly till, deposited primarily by the direct action of glacial ice in a variety of landforms. Also, a general term for a landform composed mainly of till (except for kame moraines, which are composed mainly of stratified outwash) that has been deposited by a glacier.

Some types of moraines are disintegration, end, ground, kame, lateral, recessional, and terminal.

Morphology, soil. The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.

Mottling, soil. Irregular spots of different colors that vary in number and size.

Descriptive terms are as follows: abundance—*few*, *common*, and *many*; size—*fine*, *medium*, and *coarse*; and contrast—*faint*, *distinct*, and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium*, from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse*, more than 15 millimeters (about 0.6 inch).

Mountain. A generic term for an elevated area of the land surface, rising more than 1,000 feet (300 meters) above surrounding lowlands, commonly of restricted summit area (relative to a plateau) and generally having steep sides. A mountain can occur as a single, isolated mass or in a group forming a chain or range. Mountains are formed primarily by tectonic activity and/or volcanic action but can also be formed by differential erosion.

Muck. Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)

Mudstone. A blocky or massive, fine grained sedimentary rock in which the proportions of clay and silt are approximately equal. Also, a general term for such material as clay, silt, claystone, siltstone, shale, and argillite and that should be used only when the amounts of clay and silt are not known or cannot be precisely identified.

Munsell notation. A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.

Natric horizon. A special kind of argillic horizon that contains enough exchangeable sodium to have an adverse effect on the physical condition of the subsoil.

Neutral soil. A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)

Nodules. See Redoximorphic features.

Nose slope (geomorphology). A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent. Nose slopes consist dominantly of colluvium and slope-wash sediments (for example, slope alluvium).

Nutrient loss (in map unit descriptions). The soil may lose nutrients, fertilizers, or pesticides as a result of either surface-water runoff or percolation.

Nutrient, plant. Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

Organic material (parent material). Parent material consisting of accumulated plant remains.

Organic matter. Plant and animal residue in the soil in various stages of decomposition. The content of organic matter in the surface layer is described as follows:

Very low	less than 0.5 percent
Low	0.5 to 1.0 percent
Moderately low	1.0 to 2.0 percent
Moderate	2.0 to 4.0 percent
High	4.0 to 8.0 percent
Very high	more than 8.0 percent

- Ortstein.** A cemented spodic horizon in which the cementing material consists of illuviated sesquioxides, mostly iron and organic matter.
- Outwash.** Stratified and sorted sediments (chiefly sand and gravel) removed or “washed out” from a glacier by meltwater streams and deposited in front of or beyond the end moraine or the margin of a glacier. The coarser material is deposited nearer to the ice.
- Outwash plain.** An extensive lowland area of coarse textured glaciofluvial material. An outwash plain is commonly smooth; where pitted, it generally is low in relief.
- Paleoterrace.** An erosional remnant of a terrace that retains the surface form and alluvial deposits of its origin but was not emplaced by, and commonly does not grade to, a present-day stream or drainage network.
- Pan.** A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan*, *fragipan*, *claypan*, *plowpan*, and *traffic pan*.
- Parent material.** The unconsolidated organic and mineral material in which soil forms.
- Peat.** Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)
- Ped.** An individual natural soil aggregate, such as a granule, a prism, or a block.
- Pedisediment.** A layer of sediment, eroded from the shoulder and backslope of an erosional slope, that lies on and is being (or was) transported across a gently sloping erosional surface at the foot of a receding hill or mountain slope.
- Pedon.** The smallest volume that can be called “a soil.” A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.
- Percolation.** The movement of water through the soil.
- Permafrost.** Ground, soil, or rock that remains at or below 0 degrees C for at least 2 years. It is defined on the basis of temperature and is not necessarily frozen.
- Permeability.** The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as “saturated hydraulic conductivity,” which is defined in the “Soil Survey Manual.” In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as “permeability.” Terms describing permeability, measured in inches per hour, are as follows:
- | | |
|------------------------|------------------------|
| Impermeable | less than 0.0015 inch |
| Very slow | 0.0015 to 0.06 inch |
| Slow | 0.06 to 0.2 inch |
| Moderately slow | 0.2 to 0.6 inch |
| Moderate | 0.6 inch to 2.0 inches |
| Moderately rapid | 2.0 to 6.0 inches |
| Rapid | 6.0 to 20 inches |
| Very rapid | more than 20 inches |
- pH value.** A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)
- Phase, soil.** A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

- Piping** (in tables). Formation of subsurface tunnels or pipelike cavities by water moving through the soil.
- Pitting** (in tables). Pits caused by melting around ice. They form on the soil after plant cover is removed.
- Plastic limit.** The moisture content at which a soil changes from semisolid to plastic.
- Plasticity index.** The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.
- Plateau** (geomorphology). A comparatively flat area of great extent and elevation; specifically, an extensive land region that is considerably elevated (more than 100 meters) above the adjacent lower lying terrain, is commonly limited on at least one side by an abrupt descent, and has a flat or nearly level surface. A comparatively large part of a plateau surface is near summit level.
- Plinthite.** The sesquioxide-rich, humus-poor, highly weathered mixture of clay with quartz and other diluents. It commonly appears as red mottles, usually in platy, polygonal, or reticulate patterns. Plinthite changes irreversibly to an ironstone hardpan or to irregular aggregates on repeated wetting and drying, especially if it is exposed also to heat from the sun. In a moist soil, plinthite can be cut with a spade. It is a form of laterite.
- Plowpan.** A compacted layer formed in the soil directly below the plowed layer.
- Ponding.** Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.
- Ponding** (in map unit descriptions). The water table is at or above the surface.
- Poorly graded.** Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.
- Pore linings.** See Redoximorphic features.
- Potential native plant community.** See Climax plant community.
- Potential rooting depth (effective rooting depth).** Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.
- Prescribed burning.** Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.
- Productivity, soil.** The capability of a soil for producing a specified plant or sequence of plants under specific management.
- Profile, soil.** A vertical section of the soil extending through all its horizons and into the parent material.
- Proper grazing use.** Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.
- Rangeland.** Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.
- Reaction, soil.** A measure of acidity or alkalinity of a soil, expressed as pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is

neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid	less than 3.5
Extremely acid	3.5 to 4.4
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5
Moderately acid	5.6 to 6.0
Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Slightly alkaline	7.4 to 7.8
Moderately alkaline	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline	9.1 and higher

Red beds. Sedimentary strata that are mainly red and are made up largely of sandstone and shale.

Redoximorphic concentrations. See Redoximorphic features.

Redoximorphic depletions. See Redoximorphic features.

Redoximorphic features. Redoximorphic features are associated with wetness and result from alternating periods of reduction and oxidation of iron and manganese compounds in the soil. Reduction occurs during saturation with water, and oxidation occurs when the soil is not saturated. Characteristic color patterns are created by these processes. The reduced iron and manganese ions may be removed from a soil if vertical or lateral fluxes of water occur, in which case there is no iron or manganese precipitation in that soil. Wherever the iron and manganese are oxidized and precipitated, they form either soft masses or hard concretions or nodules. Movement of iron and manganese as a result of redoximorphic processes in a soil may result in redoximorphic features that are defined as follows:

1. Redoximorphic concentrations.—These are zones of apparent accumulation of iron-manganese oxides, including:
 - A. Nodules and concretions, which are cemented bodies that can be removed from the soil intact. Concretions are distinguished from nodules on the basis of internal organization. A concretion typically has concentric layers that are visible to the naked eye. Nodules do not have visible organized internal structure; *and*
 - B. Masses, which are noncemented concentrations of substances within the soil matrix; *and*
 - C. Pore linings, i.e., zones of accumulation along pores that may be either coatings on pore surfaces or impregnations from the matrix adjacent to the pores.
2. Redoximorphic depletions.—These are zones of low chroma (chromas less than those in the matrix) where either iron-manganese oxides alone or both iron-manganese oxides and clay have been stripped out, including:
 - A. Iron depletions, i.e., zones that contain low amounts of iron and manganese oxides but have a clay content similar to that of the adjacent matrix; *and*
 - B. Clay depletions, i.e., zones that contain low amounts of iron, manganese, and clay (often referred to as silt coatings or skeletans).
3. Reduced matrix.—This is a soil matrix that has low chroma *in situ* but undergoes a change in hue or chroma within 30 minutes after the soil material has been exposed to air.

Reduced matrix. See Redoximorphic features.

Regolith. All unconsolidated earth materials above the solid bedrock. It includes material weathered in place from all kinds of bedrock and alluvial, glacial, eolian, lacustrine, and pyroclastic deposits.

Relief. The relative difference in elevation between the upland summits and the lowlands or valleys of a given region.

Residuum (residual soil material). Unconsolidated, weathered or partly weathered mineral material that accumulated as bedrock disintegrated in place.

Restricted permeability (in map unit descriptions). The soil has a slowly or very slowly permeable layer within a depth of 80 inches.

Restrictive feature (in map unit descriptions). The soil has a layer that inhibits the movement of water and/or roots. Examples include bedrock, ortstein, and dense layers.

Rill. A very small, steep-sided channel resulting from erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. A rill generally is not an obstacle to wheeled vehicles and is shallow enough to be smoothed over by ordinary tillage.

Riser. The vertical or steep side slope (e.g., escarpment) of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural, steplike landforms, such as successive stream terraces.

Road cut. A sloping surface produced by mechanical means during road construction. It is commonly on the uphill side of the road.

Rock fragments. Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

Rock fragments (in map unit descriptions). Equipment use and other uses are limited because of excess gravel or cobbles within a depth of 12 inches.

Root zone. The part of the soil that can be penetrated by plant roots.

Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

Saline soil. A soil containing soluble salts in an amount that impairs growth of plants. A saline soil does not contain excess exchangeable sodium.

Sand. As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

Sandstone. Sedimentary rock containing dominantly sand-sized particles.

Sandy textures (in map unit descriptions). Equipment use and other uses are limited because of sandy textures in the surface layer.

Sapric soil material (muck). The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

Saturated hydraulic conductivity (Ksat). See Permeability.

Saturation. Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

Scarification. The act of abrading, scratching, loosening, crushing, or modifying the surface to increase water absorption or to provide a more tillable soil.

Seasonal wetness (in map unit descriptions). Equipment use and other uses are limited because the water table is at a depth between 6 and 40 inches during some part of the year.

Sedimentary rock. A consolidated deposit of clastic particles, chemical precipitates, or organic remains accumulated at or near the surface of the earth under normal low temperature and pressure conditions. Sedimentary rocks include

consolidated equivalents of alluvium, colluvium, drift, and eolian, lacustrine, and marine deposits. Examples are sandstone, siltstone, mudstone, claystone, shale, conglomerate, limestone, dolomite, and coal.

Sequum. A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)

Series, soil. A group of soils that have profiles that are almost alike. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

Sesquioxide. An oxide containing three atoms of oxygen and two of another element (e.g., aluminum oxide).

Severe wetness (in map unit descriptions). Equipment use and other uses are limited because the water table is at or near the surface during some part of the year.

Shale. Sedimentary rock that formed by the hardening of a deposit of clay, silty clay, or silty clay loam and that has a tendency to split into thin layers.

Sheet erosion. The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.

Shoulder. The convex, erosional surface near the top of a hillslope. A shoulder is a transition from summit to backslope.

Shrink-swell (in tables). The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.

Side slope (geomorphology). A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel. Side slopes are dominantly colluvium and slope-wash sediments.

Silica. A combination of silicon and oxygen. The mineral form is called quartz.

Silica-sesquioxide ratio. The ratio of the number of molecules of silica to the number of molecules of alumina and iron oxide. The more highly weathered soils or their clay fractions in warm-temperate, humid regions, and especially those in the tropics, generally have a low ratio.

Silt. As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

Siltstone. An indurated silt having the texture and composition of shale but lacking its fine lamination or fissility; a massive mudstone in which silt predominates over clay.

Similar soils. Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

Sinkhole. A closed, circular or elliptical depression, commonly funnel shaped, characterized by subsurface drainage and formed either by dissolution of the surface of underlying bedrock (e.g., limestone, gypsum, or salt) or by collapse of underlying caves within bedrock. Complexes of sinkholes in carbonate-rock terrain are the main components of karst topography.

Site index. A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.

Slickensides (pedogenic). Grooved, striated, and/or glossy (shiny) slip faces on structural peds, such as wedges; produced by shrink-swell processes, most commonly in soils that have a high content of expansive clays.

Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance.

Slope alluvium. Sediment gradually transported down the slopes of mountains or hills primarily by nonchannel alluvial processes (i.e., slope-wash processes) and characterized by particle sorting. Lateral particle sorting is evident on long slopes. In a profile sequence, sediments may be distinguished by differences in size and/or specific gravity of rock fragments and may be separated by stone lines. Burnished pedis and sorting of rounded or subrounded pebbles or cobbles distinguish these materials from unsorted colluvial deposits.

Slow refill (in tables). The slow filling of ponds, resulting from restricted permeability in the soil.

Sodium adsorption ratio (SAR). A measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration.

Soft bedrock. Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.

Soil. A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief and by the passage of time.

Soil rutting (in map unit descriptions). Ruts form easily during the spring and other wet periods.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay	less than 0.002

Solum. The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

Spodic horizon. A mineral soil horizon that is characterized by the illuvial accumulation of amorphous materials composed of aluminum and organic carbon with or without iron. The spodic horizon has a certain minimum thickness and a minimum quantity of extractable carbon plus iron plus aluminum in relation to its content of clay.

Stone line. In a vertical cross section, a line formed by scattered fragments or a discrete layer of angular and subangular rock fragments (commonly a gravel- or cobble-sized lag concentration) that formerly was draped across a topographic surface and was later buried by additional sediments. A stone line generally caps material that was subject to weathering, soil formation, and erosion before burial. Many stone lines seem to be buried erosion pavements, originally formed by sheet and rill erosion across the land surface.

Stones. Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.

Stony. Refers to a soil containing stones in numbers that interfere with or prevent tillage.

- Strath terrace.** A type of stream terrace; formed as an erosional surface cut on bedrock and thinly mantled with stream deposits (alluvium).
- Stream terrace.** One of a series of platforms in a stream valley, flanking and more or less parallel to the stream channel, originally formed near the level of the stream; represents the remnants of an abandoned flood plain, stream bed, or valley floor produced during a former state of fluvial erosion or deposition.
- Stripcropping.** Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.
- Structure, soil.** The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grain* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).
- Stubble mulch.** Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind erosion and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.
- Subsidence** (in map unit descriptions). In organic soils, subsidence is a limitation if the organic material subsides more than 24 inches when the soils are drained.
- Subsoil.** Technically, the B horizon; roughly, the part of the solum below plow depth.
- Subsoiling.** Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.
- Substratum.** The part of the soil below the solum.
- Subsurface layer.** Any surface soil horizon (A, E, AB, or EB) below the surface layer.
- Summer fallow.** The tillage of uncropped land during the summer to control weeds and allow storage of moisture in the soil for the growth of a later crop. A practice common in semiarid regions, where annual precipitation is not enough to produce a crop every year. Summer fallow is frequently practiced before planting winter grain.
- Summit.** The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.
- Surface layer.** The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the “plow layer,” or the “Ap horizon.”
- Surface soil.** The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.
- Talus.** Rock fragments of any size or shape (commonly coarse and angular) derived from and lying at the base of a cliff or very steep rock slope. The accumulated mass of such loose broken rock formed chiefly by falling, rolling, or sliding.
- Taxadjuncts.** Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.
- Terminal moraine.** An end moraine that marks the farthest advance of a glacier. It typically has the form of a massive arcuate or concentric ridge, or complex of ridges, and is underlain by till and other types of drift.
- Terrace** (conservation). An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field generally is built so that the field can be farmed. A terrace

intended mainly for drainage has a deep channel that is maintained in permanent sod.

Terrace (geomorphology). A steplike surface, bordering a valley floor or shoreline, that represents the former position of a flood plain, lake, or seashore. The term is usually applied both to the relatively flat summit surface (tread) that was cut or built by stream or wave action and to the steeper descending slope (scarp or riser) that has graded to a lower base level of erosion.

Terracettes. Small, irregular steplike forms on steep hillslopes, especially in pasture, formed by creep or erosion of surficial materials that may be induced or enhanced by trampling of livestock, such as sheep or cattle.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay*, and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."

Thin layer (in tables). Otherwise suitable soil material that is too thin for the specified use.

Till. Dominantly unsorted and nonstratified drift, generally unconsolidated and deposited directly by a glacier without subsequent reworking by meltwater, and consisting of a heterogeneous mixture of clay, silt, sand, gravel, stones, and boulders; rock fragments of various lithologies are embedded within a finer matrix that can range from clay to sandy loam.

Till plain. An extensive area of level to gently undulating soils underlain predominantly by till and bounded at the distal end by subordinate recessional or end moraines.

Tilth, soil. The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

Toeslope. The gently inclined surface at the base of a hillslope. Toeslopes in profile are commonly gentle and linear and are constructional surfaces forming the lower part of a hillslope continuum that grades to valley or closed-depression floors.

Topsoil. The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

Trace elements. Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.

Tread. The flat to gently sloping, topmost, laterally extensive slope of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural steplike landforms, such as successive stream terraces.

Tuff. A generic term for any consolidated or cemented deposit that is 50 percent or more volcanic ash.

Upland. An informal, general term for the higher ground of a region, in contrast with a low-lying adjacent area, such as a valley or plain, or for land at a higher elevation than the flood plain or low stream terrace; land above the footslope zone of the hillslope continuum.

Valley fill. The unconsolidated sediment deposited by any agent (water, wind, ice, or mass wasting) so as to fill or partly fill a valley.

Variegation. Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

Varve. A sedimentary layer or a lamina or sequence of laminae deposited in a body of still water within a year. Specifically, a thin pair of graded glaciolacustrine layers seasonally deposited, usually by meltwater streams, in a glacial lake or other body of still water in front of a glacier.

Water bars. Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.

Water erosion (in map unit descriptions. The soil is susceptible to erosion as a result of surface-water runoff.

Weathering. All physical disintegration, chemical decomposition, and biologically induced changes in rocks or other deposits at or near the earth's surface by atmospheric or biologic agents or by circulating surface waters but involving essentially no transport of the altered material.

Well graded. Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

Wilting point (or permanent wilting point). The moisture content of soil, on an oven-dry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Windthrow. The uprooting and tipping over of trees by the wind.

Tables

Soil Survey of Gogebic County, Michigan

Table 1.--Temperature and Precipitation
(Recorded in the period 1971-2000 at Ironwood, Michigan)

	Temperature						Precipitation				
Month				2 years in 10 will have--				2 years in 10 will have--			
	Average daily maximum	Average daily minimum	Average	Maximum temperature higher than--	Minimum temperature lower than--	Average number of growing degree days*	Average	Less than--	More than--	Average number of days with 0.10 inch or more	Average snowfall
	°F	°F	°F	°F	°F	Units	In	In	In		In
January----	19.6	-0.3	9.7	45	-33	0	2.08	1.23	2.80	6	45.8
February---	25.9	3.7	14.8	53	-32	1	1.23	.56	1.82	4	24.7
March-----	35.8	14.1	25.0	63	-24	16	2.09	1.22	2.86	5	23.2
April-----	49.8	27.9	38.9	79	-2	112	2.12	1.27	2.95	5	9.8
May-----	64.4	40.3	52.3	87	20	398	2.97	1.84	4.09	6	2.1
June-----	72.6	49.5	61.0	90	30	622	4.16	2.84	5.44	8	.0
July-----	76.6	54.4	65.5	92	38	779	4.00	2.16	5.67	7	.0
August-----	74.6	52.4	63.5	90	35	728	3.72	2.31	4.94	7	.0
September--	65.1	44.2	54.6	87	25	441	3.80	2.29	5.19	8	.3
October----	53.1	34.0	43.6	79	14	177	3.38	2.02	4.59	7	5.4
November---	36.8	21.2	29.0	65	-9	27	2.98	1.60	4.22	7	27.6
December---	24.1	7.3	15.7	47	-24	1	2.05	1.35	2.78	6	41.6
Yearly:											
Average---	49.9	29.1	39.5	---	---	---	---	---	---	---	---
Extreme---	97	-41	---	93	-36	---	---	---	---	---	---
Total-----	---	---	---	---	---	3,301	34.58	30.48	38.05	76	180.2

* A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (40 degrees F).

Soil Survey of Gogebic County, Michigan

Table 2.--Freeze Dates in Spring and Fall
(Recorded in the period 1971-2000 at Ironwood, Michigan)

Probability	Temperature		
	24 °F or lower	28 °F or lower	32 °F or lower
Last freezing temperature in spring:			
1 year in 10 later than--	May 16	June 1	June 16
2 years in 10 later than--	May 11	May 25	June 10
5 years in 10 later than--	Apr. 30	May 13	May 30
First freezing temperature in fall:			
1 year in 10 earlier than--	Sept. 25	Sept. 20	Aug. 30
2 years in 10 earlier than--	Oct. 2	Sept. 24	Sept. 5
5 years in 10 earlier than--	Oct. 16	Oct. 1	Sept. 17

Table 3.--Growing Season
(Recorded in the period 1971-2000 at Ironwood,
Michigan)

Probability	Daily minimum temperature during growing season		
	Higher than 24 °F	Higher than 28 °F	Higher than 32 °F
	Days	Days	Days
9 years in 10	144	114	82
8 years in 10	152	123	91
5 years in 10	168	141	108
2 years in 10	184	158	125
1 year in 10	193	167	134

Soil Survey of Gogebic County, Michigan

Table 4.--Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
7	Histosols and Aquents, 0 to 1 percent slopes, ponded-----	335	*
10	Witbeck muck, 0 to 1 percent slopes-----	207	*
12A	Monico loam, 0 to 3 percent slopes-----	503	*
13B	Argonne fine sandy loam, 0 to 6 percent slopes-----	6,881	0.9
13C	Argonne fine sandy loam, 6 to 18 percent slopes-----	4,310	0.6
13D	Argonne fine sandy loam, 18 to 35 percent slopes-----	182	*
15B	Wabeno silt loam, 1 to 6 percent slopes-----	363	*
15C	Wabeno silt loam, 6 to 18 percent slopes-----	184	*
16A	Fence silt loam, 0 to 2 percent slopes-----	6	*
17B	Lode silt loam, 1 to 6 percent slopes-----	220	*
17C	Lode silt loam, 6 to 18 percent slopes-----	214	*
20B	Pence-Lode complex, 1 to 6 percent slopes-----	1,415	0.2
20C	Pence fine sandy loam, 6 to 18 percent slopes-----	184	*
21	Minocqua-Leafriver complex, 0 to 1 percent slopes-----	12	*
23B	Chabeneau-Karlin-Pence complex, 1 to 6 percent slopes-----	1,102	0.2
26B	Stambaugh silt loam, 1 to 6 percent slopes-----	272	*
27	Lupton and Tawas mucks, 0 to 1 percent slopes-----	1,632	0.2
28	Dawson, Greenwood, and Loxley soils, 0 to 1 percent slopes-----	12,938	1.8
29B	Pence sandy loam, very deep water table, 1 to 6 percent slopes-----	156	*
31	Ewart-Tawas complex, 0 to 1 percent slopes, frequently flooded-----	111	*
32A	Net loam, 0 to 2 percent slopes-----	1,003	0.1
35A	Beechwood muck, 0 to 4 percent slopes-----	2,730	0.4
36	Gay-Pleine complex, 0 to 1 percent slopes, stony-----	6,145	0.8
37B	Gogebic-Tula-Lupton complex, 0 to 6 percent slopes-----	13,512	1.8
38B	Gogebic fine sandy loam, sandy substratum, 1 to 6 percent slopes, stony-----	23,335	3.2
38C	Gogebic fine sandy loam, sandy substratum, 6 to 18 percent slopes, stony-----	27,376	3.7
38D	Gogebic fine sandy loam, sandy substratum, 18 to 35 percent slopes, stony-----	2,728	0.4
39B	Gogebic silt loam, sandy substratum, 1 to 6 percent slopes, stony-----	6,406	0.9
39C	Gogebic silt loam, sandy substratum, 6 to 18 percent slopes, stony-----	16,025	2.2
39D	Gogebic silt loam, sandy substratum, 18 to 35 percent slopes, stony-----	2,595	0.4
41	Lupton-Pleine-Cathro complex, 0 to 1 percent slopes-----	15,155	2.1
42	Ausable, frequently flooded-Tawas complex, 0 to 1 percent slopes-----	3,499	0.5
43B	Karlin-Pence complex, 1 to 6 percent slopes-----	2,059	0.3
43C	Karlin-Pence complex, 6 to 18 percent slopes-----	3,321	0.5
43D	Karlin-Pence complex, 18 to 35 percent slopes-----	616	*
44B	Karlin-Keweenaw-Sarona, dense substratum, complex, 1 to 6 percent slopes-----	4,469	0.6
44C	Karlin-Keweenaw-Sarona, dense substratum, complex, 6 to 25 percent slopes-----	17,407	2.4
44D	Karlin-Keweenaw-Sarona, dense substratum, complex, 25 to 50 percent slopes-----	4,032	0.6
46C	Amasa-Karlin complex, esker, 2 to 18 percent slopes-----	406	*
46D	Amasa-Karlin complex, esker, 18 to 35 percent slopes-----	1,034	0.1
46E	Amasa-Karlin complex, esker, 35 to 55 percent slopes-----	547	*
46F	Amasa-Karlin complex, esker, 55 to 75 percent slopes-----	7	*
47B	Karlin, very deep water table-Noseum-Gay complex, 0 to 6 percent slopes-----	4,584	0.6
48C	Karlin-Michigamme complex, 2 to 18 percent slopes, rocky-----	611	*
48F	Karlin-Michigamme complex, 25 to 75 percent slopes, very rocky-----	7	*
49B	Pelissier-Sarwet complex, 1 to 6 percent slopes-----	14	*
49C	Pelissier-Sarwet complex, 6 to 25 percent slopes-----	187	*
49D	Pelissier gravelly sandy loam, 25 to 50 percent slopes-----	55	*
52B	Pence-Vilas complex, 1 to 6 percent slopes-----	6,057	0.8
52C	Pence-Vilas complex, 6 to 18 percent slopes-----	901	0.1
53B	Manitowish-Croswell complex, 1 to 6 percent slopes-----	500	*
57B	Karlin-Manitowish complex, 1 to 6 percent slopes-----	421	*
57C	Karlin-Manitowish complex, 6 to 18 percent slopes-----	74	*
58B	Vilas, very deep water table-Croswell-Pence, very deep water table, complex, 1 to 6 percent slopes-----	1,376	0.2
61	Tawas-Kinross complex, 0 to 2 percent slopes-----	267	*
62B	Pelkie loamy very fine sand, 1 to 6 percent slopes-----	98	*
83	Bowstring muck, 0 to 1 percent slopes, frequently flooded-----	92	*
141D	Oldman very gravelly silt loam, 8 to 15 percent slopes, very stony-----	320	*
141E	Oldman very gravelly silt loam, 15 to 35 percent slopes, very stony-----	18	*
141F	Porkies very stony silt loam, 35 to 70 percent slopes, very stony-----	1	*
214B	Amnicon-Bergland complex, 0 to 6 percent slopes-----	59	*

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 4.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
216B	Amnicon silt loam, 2 to 8 percent slopes-----	2,052	0.3
217A	Cuttre silt loam, 0 to 3 percent slopes-----	1,389	0.2
218	Bergland mucky clay, 0 to 1 percent slopes-----	669	*
219B	Payseor-Froberg complex, 0 to 4 percent slopes-----	312	*
222	Matchwood mucky clay, 0 to 2 percent slopes, frequently ponded-----	178	*
225A	Cuttre-Bergland complex, 0 to 3 percent slopes-----	356	*
226B	Froberg clay, 1 to 6 percent slopes-----	500	*
230B	Moquah-Arnheim complex, 0 to 3 percent slopes, frequently flooded-----	4,480	0.6
231	Matchwood-Dorval complex, 0 to 1 percent slopes-----	44	*
233	Schaat Creek silt loam, 0 to 1 percent slopes, frequently flooded-----	254	*
239D	Miskoaki silt loam, 15 to 35 percent slopes-----	10	*
277B	Kellogg, sandy substratum-Allendale complex, 0 to 4 percent slopes-----	23	*
280B	Flintsteel loam, 1 to 8 percent slopes-----	10,255	1.4
280C	Flintsteel loam, 8 to 15 percent slopes-----	1,624	0.2
282B	Big Iron-Flintsteel complex, 0 to 4 percent slopes-----	4,483	0.6
283B	Loggerhead-Noseum-Ubly complex, 1 to 6 percent slopes-----	279	*
283C	Loggerhead-Noseum-Ubly complex, 6 to 12 percent slopes-----	346	*
284	Aquents, ponded-Gull Point, frequently flooded, complex, 0 to 1 percent slopes-----	367	*
285F	Rockland-Arnheim, frequently flooded, complex, 0 to 70 percent slopes-----	9,988	1.4
286A	Big Iron-Belding complex, 0 to 2 percent slopes-----	206	*
287	Trap Falls-Tonkey complex, 0 to 1 percent slopes-----	458	*
289B	Amasa very cobbly silt loam, beach ridges, 1 to 6 percent slopes-----	138	*
290B	Flintsteel silt loam, 1 to 6 percent slopes-----	2,556	0.3
290C	Flintsteel silt loam, 6 to 18 percent slopes-----	682	*
291B	Kalkaska sand, 0 to 8 percent slopes-----	378	*
291D	Kalkaska sand, 8 to 18 percent slopes-----	86	*
292B	Manido-Richter complex, 0 to 6 percent slopes-----	175	*
293A	Wainola-Trap Falls complex, 0 to 3 percent slopes-----	37	*
296B	Manido-Fence-Gogebic, sandy substratum, complex, 1 to 6 percent slopes-----	942	0.1
296D	Manido-Sporley-Gogebic, sandy substratum, complex, 18 to 35 percent slopes-----	300	*
299B	Zandi-Amasa-Flintsteel complex, 0 to 6 percent slopes-----	2,275	0.3
299C	Zandi-Amasa-Flintsteel complex, 6 to 18 percent slopes-----	1,091	0.1
301A	Moodig loam, 0 to 4 percent slopes-----	4,360	0.6
302B	Manitowish sandy loam, 1 to 6 percent slopes-----	1,701	0.2
302C	Manitowish sandy loam, 6 to 18 percent slopes-----	65	*
303	Bowstring-Arnheim complex, 0 to 1 percent slopes, frequently flooded-----	14,004	1.9
305B	Keweenaw-Siskiwit complex, 1 to 6 percent slopes-----	361	*
305C	Keweenaw-Siskiwit complex, 6 to 18 percent slopes-----	86	*
307	Lupton and Cathro soils, 0 to 1 percent slopes-----	27,683	3.8
309	Cathro muck, drainageway, 0 to 1 percent slopes-----	9,821	1.3
310B	Gogebic fine sandy loam, 1 to 6 percent slopes, stony-----	59,757	8.2
310C	Gogebic fine sandy loam, 6 to 18 percent slopes, stony-----	27,595	3.8
310D	Gogebic fine sandy loam, 18 to 35 percent slopes, stony-----	2,621	0.4
310E	Schweitzer fine sandy loam, 35 to 55 percent slopes, stony-----	211	*
311B	Tula-Gogebic complex, 0 to 6 percent slopes, stony-----	52,944	7.2
312A	Tula-Foxpaw-Gay complex, 0 to 4 percent slopes, stony-----	5,231	0.7
316	Gay loam, 0 to 1 percent slopes, stony-----	10,039	1.4
317B	Gogebic silt loam, 1 to 6 percent slopes, stony-----	17,054	2.3
317C	Gogebic silt loam, 6 to 18 percent slopes, stony-----	24,632	3.4
317D	Gogebic silt loam, 18 to 35 percent slopes, stony-----	2,522	0.3
319B	McMillan-Noseum complex, 1 to 6 percent slopes-----	2,018	0.3
319C	McMillan-Islandlake complex, 6 to 18 percent slopes-----	1,615	0.2
319D	McMillan-Islandlake complex, 18 to 35 percent slopes-----	163	*
319E	McMillan-Islandlake complex, 35 to 55 percent slopes-----	185	*
322B	Stutts-Keweenaw complex, 1 to 6 percent slopes-----	597	*
322C	Stutts-Keweenaw complex, 6 to 18 percent slopes-----	654	*
322D	Stutts-Keweenaw complex, 18 to 35 percent slopes-----	206	*
323B	Keweenaw-Kalkaska complex, 1 to 6 percent slopes-----	865	0.1
323C	Keweenaw-Kalkaska complex, 6 to 18 percent slopes-----	2,020	0.3
323D	Keweenaw-Kalkaska complex, 18 to 35 percent slopes-----	984	0.1

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 4.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
325B	Siskiwit-Gogebic complex, 1 to 6 percent slopes, stony-----	206	*
325C	Siskiwit-Gogebic complex, 6 to 18 percent slopes, stony-----	45	*
327	Foxpaw-Sarwet complex, 0 to 1 percent slopes-----	851	0.1
328B	Annalake-Karlin complex, 1 to 6 percent slopes-----	538	*
328C	Annalake-Karlin complex, 6 to 18 percent slopes-----	979	0.1
328D	Karlin-Zandi complex, 18 to 35 percent slopes-----	582	*
329A	Tula silt loam, 0 to 4 percent slopes-----	27	*
351B	Gogebic silt loam, 1 to 6 percent slopes, rocky, very stony-----	685	*
351C	Gogebic silt loam, 6 to 18 percent slopes, rocky, very stony-----	3,801	0.5
351D	Gogebic silt loam, 18 to 35 percent slopes, rocky, very stony-----	3,994	0.5
351E	Schweitzer silt loam, 35 to 55 percent slopes, rocky, very stony-----	151	*
351F	Schweitzer silt loam, 55 to 75 percent slopes, rocky, very stony-----	444	*
353A	Tula fine sandy loam, 0 to 4 percent slopes, stony-----	7,927	1.1
354B	Gogebic fine sandy loam, 1 to 6 percent slopes, rocky, very stony-----	883	0.1
354C	Gogebic fine sandy loam, 6 to 18 percent slopes, rocky, very stony-----	5,076	0.7
354D	Gogebic fine sandy loam, 18 to 35 percent slopes, rocky, very stony-----	637	*
354E	Schweitzer fine sandy loam, 35 to 55 percent slopes, rocky, very stony-----	57	*
354F	Schweitzer fine sandy loam, 55 to 70 percent slopes, rocky, very stony-----	10	*
363C	Talus-Arcadian complex, 6 to 18 percent slopes, very rocky-----	387	*
363D	Talus-Arcadian complex, 18 to 35 percent slopes, very rocky-----	2,466	0.3
363E	Talus-Arcadian complex, 35 to 55 percent slopes, very rocky-----	118	*
363F	Talus-Arcadian complex, 55 to 75 percent slopes, very rocky-----	336	*
364F	Talus, 35 to 75 percent slopes-----	4	*
365F	Rock outcrop, 75 to 100 percent slopes-----	55	*
369C	Dishno-Gogebic-Peshekee-Rock outcrop complex, 6 to 18 percent slopes, very stony-----	727	*
369D	Dishno-Gogebic-Peshekee-Rock outcrop complex, 18 to 35 percent slopes, very stony-----	2,961	0.4
369E	Michigamme-Schweitzer-Peshekee-Rock outcrop complex, 35 to 55 percent slopes, very stony	1,328	0.2
369F	Michigamme-Schweitzer-Peshekee-Rock outcrop complex, 55 to 75 percent slopes, very stony	1,029	0.1
370E	Peshekee-Rock outcrop complex, 35 to 55 percent slopes, very stony-----	205	*
370F	Peshekee-Rock outcrop complex, 55 to 75 percent slopes, very stony-----	192	*
375	Dumps and Pits, mine-----	732	*
380	Beseman and Greenwood soils, 0 to 1 percent slopes-----	839	0.1
382	Cathro-Arnheim, frequently flooded, complex, 0 to 1 percent slopes-----	1,957	0.3
388	Gay-Tula complex, 0 to 3 percent slopes, stony-----	1,104	0.2
398B	Tula-Gay-Wakefield complex, 0 to 6 percent slopes, stony-----	1,519	0.2
418	Loxley and Beseman soils, 0 to 1 percent slopes-----	7,930	1.1
419	Pleine-Cathro-Gay complex, 0 to 1 percent slopes, stony-----	15,463	2.1
424	Gay mucky peat, 0 to 1 percent slopes, stony-----	8,239	1.1
425	Foxpaw-Gay complex, 0 to 2 percent slopes, stony-----	8,482	1.2
428C	Gogebic-Michigamme complex, 2 to 18 percent slopes, rocky, very stony-----	1,952	0.3
428D	Gogebic-Michigamme complex, 18 to 35 percent slopes, rocky, very stony-----	2,121	0.3
429B	Gogebic-Peshekee complex, 1 to 6 percent slopes, very rocky, very stony-----	5,605	0.8
429C	Gogebic-Peshekee complex, 6 to 18 percent slopes, very rocky, very stony-----	14,956	2.0
429D	Gogebic-Peshekee complex, 18 to 35 percent slopes, very rocky, very stony-----	1,145	0.2
429E	Schweitzer-Peshekee complex, 35 to 55 percent slopes, very rocky, very stony-----	598	*
430B	Stutts loamy fine sand, 1 to 6 percent slopes-----	712	*
430C	Stutts loamy fine sand, 6 to 18 percent slopes-----	1,668	0.2
430D	Stutts loamy fine sand, 18 to 35 percent slopes-----	816	0.1
430E	Stutts loamy fine sand, 35 to 55 percent slopes-----	78	*
432C	Gogebic-Michigamme-Rock outcrop complex, 6 to 18 percent slopes, very stony-----	438	*
432D	Gogebic-Michigamme-Rock outcrop complex, 6 to 35 percent slopes, very stony-----	2,235	0.3
432E	Schweitzer-Michigamme-Rock outcrop complex, 18 to 55 percent slopes, very stony-----	982	0.1
432F	Schweitzer-Michigamme-Rock outcrop complex, 35 to 55 percent slopes, very stony-----	95	*
433B	McMillan fine sandy loam, 1 to 6 percent slopes-----	284	*
433C	McMillan fine sandy loam, 6 to 18 percent slopes-----	607	*
433D	McMillan fine sandy loam, 18 to 35 percent slopes-----	352	*
435C	Kalkaska-Waiska complex, 2 to 18 percent slopes-----	461	*
435D	Kalkaska-Waiska complex, 18 to 35 percent slopes-----	44	*
435E	Kalkaska-Waiska complex, 35 to 55 percent slopes-----	18	*
437B	Manitowish-Channing complex, 0 to 3 percent slopes, occasionally flooded, very rocky----	841	0.1

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 4.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
448F	Rockland-Rock outcrop complex, 35 to 70 percent slopes-----	97	*
449C	Flintsteel-Minocqua complex, 0 to 18 percent slopes-----	86	*
452F	Rockland silt loam, 35 to 70 percent slopes, stony-----	1,007	0.1
460B	Belding-Manido complex, 1 to 6 percent slopes-----	482	*
461B	Loggerhead loam, 1 to 8 percent slopes-----	2,646	0.4
462C	Nonesuch-Rock outcrop complex, 2 to 18 percent slopes-----	152	*
509	Cathro-Minocqua complex, drainageway, 0 to 1 percent slopes-----	3,658	0.5
511A	Gogebic-Tula-Chabeneau complex, 0 to 4 percent slopes-----	3,115	0.4
519B	Gogebic-Karlin complex, 1 to 6 percent slopes-----	386	*
519C	Gogebic-Karlin complex, 6 to 18 percent slopes-----	82	*
519D	Gogebic-Karlin complex, 18 to 35 percent slopes-----	60	*
522	Pits, sand and gravel-----	689	*
523D	Gogebic, sandy substratum-Karlin complex, 6 to 35 percent slopes-----	199	*
524C	Waiska-Amasa complex, esker, 6 to 18 percent slopes-----	63	*
524D	Waiska-Amasa complex, esker, 18 to 35 percent slopes-----	391	*
524E	Waiska-Amasa complex, esker, 35 to 50 percent slopes-----	17	*
527B	Wakefield loam, 1 to 6 percent slopes, stony-----	7,323	1.0
527C	Wakefield loam, 6 to 18 percent slopes, stony-----	2,002	0.3
527D	Wakefield loam, 18 to 35 percent slopes, stony-----	297	*
528B	Gogebic-Annalake complex, 1 to 6 percent slopes-----	1,175	0.2
528C	Gogebic-Annalake complex, 6 to 18 percent slopes-----	120	*
528D	Gogebic-Annalake complex, 18 to 35 percent slopes-----	400	*
551B	Gogebic-Dishno complex, 1 to 6 percent slopes, rocky, very stony-----	200	*
566	Beach, rubbly, very rocky-----	59	*
576B	Flintsteel-Loggerhead complex, 1 to 6 percent slopes-----	479	*
576C	Flintsteel-Loggerhead complex, 6 to 18 percent slopes-----	264	*
576D	Flintsteel-Loggerhead complex, 18 to 35 percent slopes-----	928	0.1
577B	Loggerhead-Chabeneau-Arcadian complex, 1 to 6 percent slopes, rocky-----	355	*
577C	Loggerhead-Chabeneau-Arcadian complex, 6 to 18 percent slopes, rocky-----	111	*
577D	Loggerhead-Chabeneau-Arcadian complex, 18 to 35 percent slopes, rocky-----	149	*
578D	Arcadian-Keweenaw complex, lake bench, 6 to 35 percent slopes, rocky-----	390	*
625B	Fence very fine sandy loam, 0 to 6 percent slopes-----	2,769	0.4
625C	Fence very fine sandy loam, 6 to 18 percent slopes-----	2,192	0.3
626D	Sporley very fine sandy loam, 18 to 35 percent slopes-----	119	*
626E	Sporley very fine sandy loam, 35 to 55 percent slopes-----	860	0.1
648B	Annalake very fine sandy loam, 0 to 6 percent slopes-----	145	*
648C	Annalake very fine sandy loam, 6 to 18 percent slopes-----	78	*
650	Leafriver muck, 0 to 1 percent slopes-----	276	*
652B	Manido-Annalake complex, 1 to 6 percent slopes-----	1,352	0.2
656B	Stutts-Zandi complex, 1 to 6 percent slopes-----	844	0.1
656C	Stutts-Zandi complex, 6 to 18 percent slopes-----	298	*
656D	Stutts-Zandi complex, 18 to 35 percent slopes-----	116	*
680B	Tonkey-Pleine-Annalake complex, 0 to 1 percent slopes-----	4,127	0.6
681	Cathro-Tonkey complex, 0 to 1 percent slopes-----	1,565	0.2
683B	Amasa-Oldman complex, 1 to 6 percent slopes-----	1,426	0.2
683C	Amasa-Oldman complex, 6 to 18 percent slopes-----	626	*
683D	Amasa-Oldman complex, 18 to 35 percent slopes-----	73	*
684B	Amasa cobbly fine sandy loam, 1 to 6 percent slopes-----	3,852	0.5
684C	Amasa cobbly fine sandy loam, 6 to 18 percent slopes-----	648	*
684D	Amasa cobbly fine sandy loam, 18 to 35 percent slopes-----	877	0.1
686B	Annalake-Robago complex, 0 to 6 percent slopes-----	3,457	0.5
688	Cathro-Leafriver complex, 0 to 1 percent slopes, frequently flooded-----	547	*
689B	Chabeneau-Channing-Gogebic complex, 0 to 6 percent slopes, stony-----	2,380	0.3
691B	Dishno-Tula-Rock outcrop complex, 0 to 6 percent slopes-----	269	*
691D	Dishno-Tula-Rock outcrop complex, 0 to 35 percent slopes-----	397	*
693B	Chabeneau-Annalake complex, 0 to 6 percent slopes-----	3,049	0.4
694D	Annalake-Stutts-Arnheim, frequently flooded, complex, drainageway, 0 to 35 percent slopes-----	510	*
5170	Minocqua-Pleine-Cathro complex, 0 to 2 percent slopes-----	1,302	0.2
5171B	Tula-Wormet-Gogebic, sandy substratum, complex, 0 to 6 percent slopes-----	753	0.1

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 4.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
5172B	Gogebic, sandy substratum-Pence-Cathro complex, 0 to 6 percent slopes-----	706	*
5172C	Gogebic, sandy substratum-Pence-Cathro complex, 0 to 18 percent slopes-----	3,214	0.4
5172D	Gogebic, sandy substratum-Pence-Cathro complex, 0 to 35 percent slopes-----	177	*
5173D	Gogebic, sandy substratum-Pence complex, 18 to 35 percent slopes-----	180	*
MW	Miscellaneous water-----	81	*
W	Water-----	28,432	3.9
	Total-----	732,256	100.0

* Less than 0.1 percent.

Soil Survey of Gogebic County, Michigan

Table 5.--Land Capability and Yields per Acre of Crops and Pasture

(Yields are those that can be expected under a high level of management. They are for nonirrigated areas. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil)

Map symbol and soil name	Land capability	Alfalfa hay	Oats	Improved permanent pasture	Unimproved permanent pasture	Trefoil hay
		Tons	Bu	AUM*	AUM*	Tons
7----- Histosols and Aquents	8w	---	---	---	---	---
10----- Witbeck	5w	---	---	---	---	---
12A----- Monico	2e	4.0	75	4.2	2.0	4.0
13B----- Argonne	2e	4.0	65	6.3	3.4	3.5
13C----- Argonne	4e	3.8	60	6.1	3.2	3.3
13D----- Argonne	7e	---	---	---	---	---
15B----- Wabeno	2e	2.5	75	2.7	1.5	2.5
15C----- Wabeno	4e	2.3	70	2.5	1.3	2.3
16A----- Fence	2s	4.0	70	5.8	3.0	2.7
17B----- Lode	3s	3.5	75	2.5	1.3	2.3
17C----- Lode	4e	3.3	70	2.5	1.3	2.2
20B----- Pence----- Lode-----	3s 3s	3.5	55	5.0	2.5	2.5
20C----- Pence	6e	3.3	50	4.7	2.3	2.4
21----- Minocqua----- Leafriver-----	6w 7w	---	---	---	2.5	---
23B----- Chabeneau----- Karlin----- Pence-----	6s 3s 3s	3.0	57	4.3	2.0	2.3
26B----- Stambaugh	3s	4.2	75	6.6	3.6	3.5

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Alfalfa hay	Oats	Improved permanent pasture	Unimproved permanent pasture	Trefoil hay
		Tons	Bu	AUM*	AUM*	Tons
27----- Lupton----- Tawas-----	6w 6w	---	---	---	---	---
28----- Dawson----- Greenwood----- Loxley-----	7w 7w 7w	---	---	---	---	---
29B----- Pence, very deep water table	3s	3.5	55	5.0	2.5	2.5
31----- Evart----- Tawas-----	7w 6w	---	---	---	---	---
32A----- Net	7s	---	---	---	---	---
35A----- Beechwood	2e	3.4	65	---	---	---
36----- Gay----- Pleine-----	5w 5w	---	---	---	---	---
37B----- Gogebic----- Tula----- Lupton-----	2e 2w 6w	3.4	70	2.7	1.4	3.5
38B----- Gogebic, sandy substratum	4e	4.0	65	4.3	1.4	3.5
38C----- Gogebic, sandy substratum	6e	3.8	60	4.1	1.2	3.3
38D----- Gogebic, sandy substratum	7e	---	---	---	---	---
39B----- Gogebic, sandy substratum	4e	4.0	65	4.3	1.4	3.5
39C----- Gogebic, sandy substratum	6e	3.8	60	4.1	1.2	3.3
39D----- Gogebic, sandy substratum	7e	---	---	---	---	---

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Alfalfa hay	Oats	Improved permanent pasture	Unimproved permanent pasture	Trefoil hay
		Tons	Bu	AUM*	AUM*	Tons
41-----		---	---	---	---	---
Lupton-----	6w					
Pleine-----	5w					
Cathro-----	6w					
42-----		---	---	---	---	---
Ausable-----	7w					
Tawas-----	6w					
43B-----		3.3	58	4.7	2.3	2.5
Karlin-----	3s					
Pence-----	3s					
43C-----		3.1	55	4.7	2.3	2.3
Karlin-----	4e					
Pence-----	4e					
43D-----		---	---	---	---	---
Karlin-----	7e					
Pence-----	7e					
44B-----		3.3	62	4.7	2.4	2.6
Karlin-----	3s					
Keweenaw-----	2e					
Sarona-----	2e					
44C-----		3.1	60	4.7	2.4	2.5
Karlin-----	6e					
Keweenaw-----	6e					
Sarona-----	6e					
44D-----		---	---	---	---	---
Karlin-----	7e					
Keweenaw-----	7e					
Sarona-----	7e					
46C-----		3.6	68	4.1	1.4	3.0
Amasa-----	4e					
Karlin-----	4e					
46D-----		---	---	---	---	---
Amasa-----	7e					
Karlin-----	7e					
46E-----		---	---	---	---	---
Amasa-----	7e					
Karlin-----	7e					
46F-----		---	---	---	---	---
Amasa-----	7e					
Karlin-----	7e					
47B-----		3.3	60	3.6	1.2	2.5
Karlin-----	3s					
Noseum-----	4s					
Gay-----	5w					

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Alfalfa hay	Oats	Improved permanent pasture	Unimproved permanent pasture	Trefoil hay
		Tons	Bu	AUM*	AUM*	Tons
48C----- Karlín----- Michigamme-----	4e 6s	3.2	58	3.8	1.2	2.6
48F----- Karlín----- Michigamme-----	7e 7s	---	---	---	---	---
49B----- Pelissier----- Sarwet-----	4s 2e	2.9	50	2.8	1.5	2.3
49C----- Pelissier----- Sarwet-----	6s 4e	2.8	48	2.8	1.5	2.2
49D----- Pelissier	7s	---	---	---	---	---
52B----- Pence----- Vilas-----	3s 4s	3.0	45	2.5	1.2	2.5
52C----- Pence----- Vilas-----	4e 6s	2.8	40	2.5	1.2	2.2
53B----- Manitowish----- Croswell-----	2e 6s	3.0	55	4.2	2.4	2.9
57B----- Karlín----- Manitowish-----	3s 2e	3.2	60	2.9	1.4	2.7
57C----- Karlín----- Manitowish-----	4e 2e	3.0	55	2.9	1.4	2.5
58B----- Vilas----- Croswell----- Pence-----	4s 6s 3s	2.5	45	1.7	0.6	2.8
61----- Tawas----- Kinross-----	6w 3s	---	---	---	---	---
62B----- Pelkie	6s	2.5	50	1.3	0.5	2.5
83----- Bowstring	7w	---	---	---	---	---
141D----- Oldman	6s	---	---	---	---	---
141E----- Oldman	7e	---	---	---	---	---

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Alfalfa hay	Oats	Improved permanent pasture	Unimproved permanent pasture	Trefoil hay
		Tons	Bu	AUM*	AUM*	Tons
141F----- Porkies	7s	---	---	---	---	---
214B----- Amnicon----- Bergland-----	2e 5w	3.3	65	3.0	1.3	3.5
216B----- Amnicon	2e	3.3	65	3.0	1.3	3.5
217A----- Cuttre	3w	3.5	70	5.0	2.4	3.7
218----- Bergland	5w	---	---	---	---	2.5
219B----- Payseor----- Froberg-----	3w 3e	2.3	70	2.9	1.5	2.5
222----- Matchwood	5w	---	---	---	1.2	1.8
225A----- Cuttre----- Bergland-----	3w 5w	3.5	70	5.0	2.4	3.7
226B----- Froberg	3e	2.5	70	2.9	1.5	2.5
230B----- Moquah----- Arnheim-----	5w 7w	3.0	60	2.6	1.3	3.0
231----- Matchwood----- Dorval-----	5w 5w	---	---	---	---	---
233----- Schaat Creek	6w	---	---	---	---	---
239D----- Miskoaki	4e	---	---	---	---	---
277B----- Kellogg----- Allendale-----	3s 3e	2.7	30	3.0	0.9	3.0
280B----- Flintsteel	2e	3.4	65	3.2	1.9	3.0
280C----- Flintsteel	3e	3.2	60	3.2	1.9	2.9
282B----- Big Iron----- Flintsteel-----	2w 2e	4.0	75	4.2	2.0	4.0

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Alfalfa hay	Oats	Improved permanent pasture	Unimproved permanent pasture	Trefoil hay
		Tons	Bu	AUM*	AUM*	Tons
283B----- Loggerhead----- Noseum----- Ubyl-----	2s 4s 2e	2.8	58	3.2	2.0	2.5
283C----- Loggerhead----- Noseum----- Ubyl-----	3e 6s 3e	2.7	55	3.2	2.0	2.3
284----- Aquents----- Gull Point-----	8w 6w	---	---	---	---	---
285F----- Rockland----- Arnheim-----	7e 7w	---	---	---	---	---
286A----- Big Iron----- Belding-----	2w 2e	4.0	75	4.2	2.0	4.0
287----- Trap Falls----- Tonkey-----	5w 5w	---	---	---	---	---
289B----- Amasa	3s	2.8	55	2.8	1.3	---
290B----- Flintsteel	2e	3.4	65	3.2	1.9	3.0
290C----- Flintsteel	2e	3.3	62	3.2	1.9	2.9
291B----- Kalkaska	4s	1.6	40	1.5	0.5	---
291D----- Kalkaska	6s	1.6	40	1.5	0.5	---
292B----- Manido----- Richter-----	4s 2e	2.5	---	---	---	---
293A----- Wainola----- Trap Falls-----	3w 5w	3.5	65	4.8	2.4	3.0
296B----- Manido----- Fence----- Gogebic-----	4s 2e 4s	3.0	70	3.5	1.7	2.8
296D----- Manido----- Sporley----- Gogebic-----	7s 7e 7e	---	---	---	---	---

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Alfalfa hay	Oats	Improved permanent pasture	Unimproved permanent pasture	Trefoil hay
		Tons	Bu	AUM*	AUM*	Tons
299B----- Zandi----- Amasa----- Flintsteel-----	2e 2e 2e	3.0	62	3.2	1.9	2.9
299C----- Zandi----- Amasa----- Flintsteel-----	4e 4e 4e	2.8	60	3.2	1.9	2.7
301A----- Moodig	2e	4.0	75	4.2	2.0	4.0
302B----- Manitowish	2e	3.5	60	5.2	2.6	3.0
302C----- Manitowish	4e	3.3	55	5.0	2.4	2.8
303----- Bowstring----- Arnheim-----	7w 7w	---	---	---	---	---
305B----- Keweenaw----- Siskiwit-----	2e 2e	2.7	55	4.0	2.3	2.7
305C----- Keweenaw----- Siskiwit-----	4e 4e	2.5	52	4.0	2.3	2.5
307----- Lupton----- Cathro-----	6w 6w	---	---	---	---	---
309----- Cathro	6w	---	---	---	---	---
310B----- Gogebic	4e	4.0	65	4.3	1.4	3.5
310C----- Gogebic	6e	3.8	60	4.1	1.2	3.3
310D----- Gogebic	7e	---	---	---	---	---
310E----- Schweitzer	7s	---	---	---	---	---
311B----- Tula----- Gogebic-----	2w 4e	3.6	65	4.3	1.7	3.2
312A----- Tula----- Foxpaw----- Gay-----	4w 5w 5w	---	---	---	---	---

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Alfalfa hay	Oats	Improved permanent pasture	Unimproved permanent pasture	Trefoil hay
		Tons	Bu	AUM*	AUM*	Tons
316----- Gay	5w	---	---	---	---	---
317B----- Gogebic	4e	4.0	65	4.3	1.4	3.5
317C----- Gogebic	6e	3.8	60	4.1	1.2	3.3
317D----- Gogebic	7e	---	---	---	---	---
319B----- McMillan----- Noseum-----	2e 4s	3.2	57	2.8	1.3	2.5
319C----- McMillan----- Islandlake-----	4e 6s	3.1	55	2.8	1.3	2.3
319D----- McMillan----- Islandlake-----	7e 7s	---	---	---	---	---
319E----- McMillan----- Islandlake-----	7e 7s	---	---	---	---	---
322B----- Stutts----- Keweenaw-----	3s 2e	3.0	57	2.7	1.3	2.6
322C----- Stutts----- Keweenaw-----	4e 4e	2.9	55	2.8	1.3	2.4
322D----- Stutts----- Keweenaw-----	7e 7e	---	---	---	---	---
323B----- Keweenaw----- Kalkaska-----	2e 4s	2.3	45	2.3	1.1	1.9
323C----- Keweenaw----- Kalkaska-----	4e 6s	2.2	40	2.3	1.1	---
323D----- Keweenaw----- Kalkaska-----	7e 7s	---	---	---	---	---
325B----- Siskiwit----- Gogebic-----	2e 2e	3.0	63	3.8	1.8	3.2

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Alfalfa hay	Oats	Improved permanent pasture	Unimproved permanent pasture	Trefoil hay
		Tons	Bu	AUM*	AUM*	Tons
325C----- Siskiwit----- Gogebic-----	4e 4e	2.8	60	3.8	1.8	3.1
327----- Foxpaw----- Sarwet-----	5w 2s	---	---	---	---	---
328B----- Annalake----- Karlin-----	2e 3s	3.3	65	2.6	1.2	2.7
328C----- Annalake----- Karlin-----	3e 4e	3.1	60	2.6	1.2	2.5
328D----- Karlin----- Zandi-----	7e 7e	---	---	---	---	---
329A----- Tula	2w	3.2	65	4.3	1.4	2.8
351B----- Gogebic	6s	---	---	---	---	---
351C----- Gogebic	6s	---	---	---	---	---
351D----- Gogebic	7e	---	---	---	---	---
351E----- Schweitzer	7s	---	---	---	---	---
351F----- Schweitzer	7s	---	---	---	---	---
353A----- Tula	4w	3.2	65	4.3	1.4	2.8
354B----- Gogebic	6s	---	---	---	---	---
354C----- Gogebic	6s	---	---	---	---	---
354D----- Gogebic	7e	---	---	---	---	---
354E----- Schweitzer	7s	---	---	---	---	---
354F----- Schweitzer	7s	---	---	---	---	---

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Alfalfa hay	Oats	Improved permanent pasture	Unimproved permanent pasture	Trefoil hay
		Tons	Bu	AUM*	AUM*	Tons
363C-----		---	---	---	---	---
Talus-----	8s					
Arcadian-----	6s					
363D-----		---	---	---	---	---
Talus-----	8s					
Arcadian-----	7s					
363E-----		---	---	---	---	---
Talus-----	8s					
Arcadian-----	7s					
363F-----		---	---	---	---	---
Talus-----	8s					
Arcadian-----	7s					
364F-----	8s	---	---	---	---	---
Talus						
365F-----	8s	---	---	---	---	---
Rock outcrop						
369C-----		---	---	---	---	---
Dishno-----	6s					
Gogebic-----	6s					
Peshekee-----	7s					
Rock outcrop-----	8s					
369D-----		---	---	---	---	---
Dishno-----	7e					
Gogebic-----	7e					
Peshekee-----	7s					
Rock outcrop-----	8s					
369E-----		---	---	---	---	---
Michigamme-----	7s					
Schweitzer-----	7s					
Peshekee-----	7s					
Rock outcrop-----	8s					
369F-----		---	---	---	---	---
Michigamme-----	7s					
Schweitzer-----	7s					
Peshekee-----	7s					
Rock outcrop-----	8s					
370E-----		---	---	---	---	---
Peshekee-----	7s					
Rock outcrop-----	8s					
370F-----		---	---	---	---	---
Peshekee-----	7s					
Rock outcrop-----	8s					
375.						
Dumps and Pits, mine						

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Alfalfa hay	Oats	Improved permanent pasture	Unimproved permanent pasture	Trefoil hay
		Tons	Bu	AUM*	AUM*	Tons
380-----		---	---	---	---	---
Beseman-----	7w					
Greenwood-----	7w					
382-----		---	---	---	---	---
Cathro-----	7w					
Arnheim-----	7w					
388-----		---	---	---	---	---
Gay-----	5w					
Tula-----	4w					
398B-----		---	---	---	---	---
Tula-----	4w					
Gay-----	5w					
Wakefield-----	4e					
418-----		---	---	---	---	---
Loxley-----	7w					
Beseman-----	7w					
419-----		---	---	---	---	---
Pleine-----	5w					
Cathro-----	6w					
Gay-----	5w					
424-----	5w	---	---	---	---	---
Gay						
425-----		---	---	---	---	---
Foxpaw-----	5w					
Gay-----	5w					
428C-----		---	---	---	---	---
Gogebic-----	6s					
Michigamme-----	7s					
428D-----		---	---	---	---	---
Gogebic-----	7e					
Michigamme-----	7s					
429B-----		---	---	---	---	---
Gogebic-----	6s					
Peshekee-----	3s					
429C-----		---	---	---	---	---
Gogebic-----	7e					
Peshekee-----	7s					
429D-----		---	---	---	---	---
Gogebic-----	7e					
Peshekee-----	7s					
429E-----		---	---	---	---	---
Schweitzer-----	7s					
Peshekee-----	7s					

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Alfalfa hay	Oats	Improved permanent pasture	Unimproved permanent pasture	Trefoil hay
		Tons	Bu	AUM*	AUM*	Tons
430B----- Stutts	3s	3.0	60	2.6	1.2	2.5
430C----- Stutts	4e	2.8	57	2.6	1.2	2.4
430D----- Stutts	7e	---	---	---	---	---
430E----- Stutts	7e	---	---	---	---	---
432C----- Gogebic----- Michigamme----- Rock outcrop-----	6s 7s 8s	---	---	---	---	---
432D----- Gogebic----- Michigamme----- Rock outcrop-----	7e 7s 8s	---	---	---	---	---
432E----- Schweitzer----- Michigamme----- Rock outcrop-----	7s 7s 8s	---	---	---	---	---
432F----- Schweitzer----- Michigamme----- Rock outcrop-----	7s 7s 8s	---	---	---	---	---
433B----- McMillan	2e	3.5	55	3.0	1.5	2.5
433C----- McMillan	4e	3.3	50	3.0	1.5	2.4
433D----- McMillan	7e	---	---	---	---	---
435C----- Kalkaska----- Waiska-----	6s 6s	---	---	---	---	---
435D----- Kalkaska----- Waiska-----	7s 7s	---	---	---	---	---
435E----- Kalkaska----- Waiska-----	7s 7s	---	---	---	---	---
437B----- Manitowish----- Channing-----	2e 4w	---	---	---	---	---

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Alfalfa hay	Oats	Improved permanent pasture	Unimproved permanent pasture	Trefoil hay
		Tons	Bu	AUM*	AUM*	Tons
448F----- Rockland----- Rock outcrop-----	7e 8s	---	---	---	---	---
449C----- Flintsteel----- Minocqua-----	3e 6w	4.2	85	4.5	2.2	4.3
452F----- Rockland	7e	---	---	---	---	---
460B----- Belding----- Manido-----	2e 4s	3.4	65	3.0	1.5	3.0
461B----- Loggerhead	2s	2.6	55	2.9	1.5	2.2
462C----- Nonesuch----- Rock outcrop-----	4s 8s	3.4	65	3.0	1.5	2.6
509----- Cathro----- Minocqua-----	6w 6w	---	---	---	---	---
511A----- Gogebic----- Tula----- Chabeneau-----	3s 2w 2e	3.4	62	4.3	1.4	3.2
519B----- Gogebic----- Karlin-----	4e 3s	3.5	62	3.3	1.3	3.0
519C----- Gogebic----- Karlin-----	6e 4e	3.3	60	3.3	1.3	2.8
519D----- Gogebic----- Karlin-----	7e 7e	---	---	---	---	---
522. Pits, sand and gravel						
523D----- Gogebic----- Karlin-----	7e 7e	---	---	---	---	---
524C----- Waiska----- Amasa-----	6s 4e	---	---	---	---	---
524D----- Waiska----- Amasa-----	7s 7e	---	---	---	---	---

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Alfalfa hay	Oats	Improved permanent pasture	Unimproved permanent pasture	Trefoil hay
		Tons	Bu	AUM*	AUM*	Tons
524E----- Waiska----- Amasa-----	7s 7e	---	---	---	---	---
527B----- Wakefield	4e	4.0	65	4.3	1.4	3.5
527C----- Wakefield	6e	3.9	62	4.3	1.4	3.3
527D----- Wakefield	7e	---	---	---	---	---
528B----- Gogebic----- Annalake-----	2e 2e	3.7	68	3.5	1.3	3.2
528C----- Gogebic----- Annalake-----	4e 4e	3.5	65	3.5	1.3	3.1
528D----- Gogebic----- Annalake-----	7e 7e	---	---	---	---	---
551B----- Gogebic----- Dishno-----	6s 3s	3.5	75	2.5	1.3	3.4
566----- Beach, rubbly	7s	---	---	---	---	---
576B----- Flintsteel----- Loggerhead-----	2e 2s	3.0	60	2.6	1.3	2.2
576C----- Flintsteel----- Loggerhead-----	3e 3e	2.8	58	2.6	1.3	2.1
576D----- Flintsteel----- Loggerhead-----	7e 7e	---	---	---	---	---
577B----- Loggerhead----- Chabeneau----- Arcadian-----	2s 2e 3s	2.6	55	2.2	1.1	2.0
577C----- Loggerhead----- Chabeneau----- Arcadian-----	3e 2e 6s	2.4	50	2.6	1.3	2.0
577D----- Loggerhead----- Chabeneau----- Arcadian-----	4e 2e 7s	---	---	---	---	---

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Alfalfa hay	Oats	Improved permanent pasture	Unimproved permanent pasture	Trefoil hay
		Tons	Bu	AUM*	AUM*	Tons
578D----- Arcadian----- Keweenaw-----	7s 7e	---	---	---	---	---
625B----- Fence	2e	4.0	70	3.8	1.0	2.7
625C----- Fence	4e	3.8	65	3.8	1.0	2.5
626D----- Sporley	7e	---	---	---	---	---
626E----- Sporley	7e	---	---	---	---	---
648B----- Annalake	2e	3.5	70	2.6	1.2	2.9
648C----- Annalake	4e	3.3	65	2.6	1.2	2.7
650----- Leafriver	6w	---	---	---	---	---
652B----- Manido----- Annalake-----	4s 2e	3.0	60	1.9	1.0	2.8
656B----- Stutts----- Zandi-----	3s 2e	3.3	67	2.7	1.2	2.5
656C----- Stutts----- Zandi-----	4e 4e	3.1	65	2.7	1.2	2.3
656D----- Stutts----- Zandi-----	7e 7e	---	---	---	---	---
680B----- Tonkey----- Pleine----- Annalake-----	5w 5w 2e	---	---	---	---	---
681----- Cathro----- Tonkey-----	6w 5w	---	---	---	---	---
683B----- Amasa----- Oldman-----	3s 6s	---	---	---	---	---
683C----- Amasa----- Oldman-----	6s 6s	---	---	---	---	---

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Alfalfa hay	Oats	Improved permanent pasture	Unimproved permanent pasture	Trefoil hay
		Tons	Bu	AUM*	AUM*	Tons
683D----- Amasa----- Oldman-----	7s 6s	---	---	---	---	---
684B----- Amasa	2e	4.2	75	4.6	1.6	3.5
684C----- Amasa	3e	4.0	70	4.6	1.6	3.3
684D----- Amasa	7e	---	---	---	---	---
686B----- Annalake----- Robago-----	2e 2w	3.5	70	2.6	2.0	2.9
688----- Cathro----- Leafriver-----	6w 7w	---	---	---	---	---
689B----- Chabeneau----- Channing----- Gogebic-----	6s 4w 4e	---	---	---	---	---
691B----- Dishno----- Tula----- Rock outcrop-----	3s 4w 8s	---	---	---	---	---
691D----- Dishno----- Tula----- Rock outcrop-----	7s 4w 8s	---	---	---	---	---
693B----- Chabeneau----- Annalake-----	2e 2e	3.3	62	2.3	1.2	2.9
694D----- Annalake----- Stutts----- Arnheim-----	7e 7e 7w	---	---	---	---	---
5170----- Minocqua----- Pleine----- Cathro-----	6w 5w 6w	---	---	---	---	---
5171B----- Tula----- Wormet----- Gogebic-----	7s 4s 4s	3.2	65	4.3	1.7	1.8
5172B----- Gogebic----- Pence----- Cathro-----	4s 4s 6w	3.2	65	4.3	1.4	1.8

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Alfalfa hay	Oats	Improved permanent pasture	Unimproved permanent pasture	Trefoil hay
		Tons	Bu	AUM*	AUM*	Tons
5172C----- Gogebic----- Pence----- Cathro-----	6s 6s 6w	3.0	60	4.1	1.2	1.6
5172D----- Gogebic----- Pence----- Cathro-----	7e 7s 6w	2.6	55	1.5	0.5	1.2
5173D----- Gogebic----- Pence-----	7e 7s	2.6	55	1.5	0.5	1.2

* Animal unit month: The amount of forage required to feed one mature cow, of approximately 1,000 pounds weight, with or without a calf, for 30 days.

Soil Survey of Gogebic County, Michigan

Table 6.--Prime Farmland

(Only the soils considered prime farmland are listed. Urban or built-up areas of the soils listed are not considered prime farmland)

Map symbol	Soil name
280B	Flintsteel loam, 1 to 8 percent slopes
290B	Flintsteel silt loam, 1 to 6 percent slopes

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table)

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
7. Histosols and Aquents								
10: Witbeck-----	Slight	Poorly suited: Rock fragments	Severe: Wetness	High: Wetness	Black ash----- Eastern hemlock----- Paper birch----- Red maple----- Balsam fir----- Black spruce----- Northern white cedar Tamarack-----	--- --- --- --- 61 43 28 53	--- --- --- --- --- --- --- 25	Black spruce, northern whitecedar, tamarack.
12A: Monico-----	Slight	Well suited	Moderate: Wetness	High: Wetness	American elm----- Balsam poplar----- Bigtooth aspen----- Eastern hemlock----- Northern white cedar Paper birch----- Quaking aspen----- Sugar maple----- Yellow birch----- American basswood--- Balsam fir----- Black spruce----- Red maple----- White ash----- White spruce-----	--- --- --- --- --- --- --- --- --- 51 46 51 51 52 60	--- --- --- --- --- --- --- --- --- --- --- --- --- --- ---	Eastern white pine, white spruce.
13B: Argonne-----	Slight	Poorly suited: Wetness	Moderate: Wetness	High: Wetness	American basswood--- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Quaking aspen----- Red maple----- Yellow birch----- Sugar maple-----	66 --- --- --- 75 --- --- 63	--- --- --- 92 --- --- --- 42	Eastern white pine, red pine, white spruce.
13C: Argonne-----	Slight	Poorly suited: Wetness	Moderate: Wetness	High: Wetness	American basswood--- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Quaking aspen----- Red maple----- Yellow birch----- Sugar maple-----	66 --- --- --- 75 --- --- 63	--- --- --- 92 --- --- --- 42	Eastern white pine, red pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
13D: Argonne-----	Slight	Poorly suited: Slope Wetness	Moderate: Wetness	High: Wetness	American basswood--- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Quaking aspen----- Red maple----- Yellow birch----- Sugar maple-----	66 --- --- --- 75 --- --- 63	--- --- --- 92 --- --- 42	Eastern white pine, red pine, white spruce.
15B: Wabeno-----	Slight	Poorly suited: Wetness	Slight	Low	American elm----- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Ironwood----- White ash----- Yellow birch----- American basswood--- Quaking aspen----- Sugar maple-----	--- --- --- --- --- --- --- 68 80 70	--- --- --- --- --- --- --- --- 95 46	Eastern white pine, white spruce.
15C: Wabeno-----	Moderate: Slope	Poorly suited: Wetness	Slight	Low	American elm----- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Ironwood----- White ash----- Yellow birch----- American basswood--- Quaking aspen----- Sugar maple-----	--- --- --- --- --- --- --- 68 80 70	--- --- --- --- --- --- --- --- 95 46	Eastern white pine, white spruce.
16A: Fence-----	Slight	Well suited	Moderate: Wetness	Low	American basswood--- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	--- --- --- --- --- --- 65 ---	--- --- --- --- --- --- 40 ---	Eastern white pine, red pine, white spruce.
17B: Lode-----	Slight	Well suited	Slight	Low	Balsam fir----- Bigtooth aspen----- Eastern hemlock----- Eastern white pine-- Paper birch----- Sugar maple----- Yellow birch----- Jack pine----- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- White spruce-----	--- --- --- --- --- --- --- 78 71 77 58 80 61	--- --- --- --- --- --- --- 80 68 86 35 168 ---	Eastern white pine, northern red oak, red pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
17C: Lode-----	Moderate: Slope	Well suited	Slight	Low	Balsam fir----- Bigtooth aspen----- Eastern hemlock----- Eastern white pine-- Paper birch----- Sugar maple----- Yellow birch----- Jack pine----- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- White spruce-----	--- --- --- --- --- --- --- 78 71 77 58 80 61	--- --- --- --- --- --- --- 80 68 86 35 168 ---	Eastern white pine, northern red oak, red pine, white spruce.
20B: Pence-----	Slight	Well suited	Slight	Low	Balsam fir----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine-----	--- 57 --- --- --- --- 59	--- 112 --- --- --- --- 99	Eastern white pine, jack pine, red pine.
Lode-----	Slight	Well suited	Slight	Low	Balsam fir----- Bigtooth aspen----- Eastern hemlock----- Eastern white pine-- Paper birch----- Sugar maple----- Yellow birch----- Jack pine----- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- White spruce-----	--- --- --- --- --- --- --- 78 71 77 58 80 61	--- --- --- --- --- --- --- 80 68 86 35 168 ---	Eastern white pine, northern red oak, red pine, white spruce.
20C: Pence-----	Slight	Well suited	Slight	Low	Balsam fir----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine-----	--- 57 --- --- --- --- 59	--- 112 --- --- --- --- 99	Eastern white pine, jack pine, red pine.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
21: Minocqua-----	Slight	Well suited	Severe: Wetness	High: Wetness	Balsam fir----- Balsam poplar----- Bigtooth aspen----- Black ash----- Black spruce----- Eastern hemlock----- Northern white cedar Paper birch----- Quaking aspen----- Red maple----- Sugar maple----- White spruce----- Yellow birch-----	--- --- --- --- --- --- --- --- --- --- --- --- ---	--- --- --- --- --- --- --- --- --- --- --- --- ---	Black ash, black spruce, northern whitecedar, white spruce.
Leafriver-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Droughty Wetness	Black ash----- Eastern hemlock----- Paper birch----- Red maple----- Balsam fir----- Black spruce----- Northern white cedar Tamarack-----	--- --- --- --- 61 43 28 53	--- --- --- --- --- --- --- 25	Balsam fir, black spruce, northern whitecedar, tamarack.
23B: Chabeneau-----	Slight	Well suited	Moderate: Wetness	Moderate: Wetness	Jack pine----- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- White spruce-----	78 71 77 58 80 61	80 68 86 35 168 ---	Eastern white pine, northern red oak, red pine, white spruce.
Karlin-----	Slight	Well suited	Slight	Low	American basswood--- Eastern hemlock----- Northern red oak---- Quaking aspen----- Red pine----- Sugar maple----- Yellow birch-----	66 --- 73 75 80 63 ---	--- --- 64 92 168 42 ---	Eastern white pine, jack pine, red pine, white spruce.
Pence-----	Slight	Well suited	Slight	Low	Balsam fir----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine-----	--- 57 --- --- --- --- 59	--- 112 --- --- --- --- 99	Eastern white pine, jack pine, red pine.
26B: Stambaugh-----	Slight	Well suited	Slight	Low	American basswood--- Balsam fir----- Eastern hemlock----- Eastern white pine-- Red maple----- Sugar maple----- Yellow birch-----	--- --- --- --- --- 61 ---	--- --- --- --- --- 43 ---	Eastern white pine, red pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
27: Lupton-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam fir----- Black spruce----- Jack pine----- Northern white cedar Tamarack-----	61 43 55 28 53	--- --- --- --- 25	Tamarack, white spruce.
Tawas-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam fir----- Black ash----- Northern white cedar Red maple----- Tamarack----- White spruce-----	61 --- 28 --- 53 ---	--- --- --- --- 25 ---	Tamarack, white spruce.
28: Dawson-----	Slight	Unsuited: Wetness	Severe: Wetness	High: Wetness	Eastern white pine-- Jack pine----- Black spruce----- Tamarack-----	--- --- 22 28	--- --- --- ---	---
Greenwood----	Slight	Unsuited: Wetness	Severe: Wetness	High: Wetness	Black spruce----- Red maple----- Tamarack-----	15 --- ---	29 --- ---	Black spruce.
Loxley-----	Slight	Unsuited: Wetness	Severe: Wetness	High: Wetness	Balsam fir----- Black spruce----- Tamarack----- Black spruce----- Tamarack-----	--- 15 --- 22 28	--- 29 --- --- ---	Black spruce, tamarack, black spruce, eastern white pine, jack pine, tamarack.
29B: Pence, very deep water table-----	Slight	Well suited	Slight	Low	Balsam fir----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine-----	--- 57 --- --- --- --- 59	--- 112 --- --- --- --- 99	Eastern white pine, jack pine, red pine.
31: Ewart-----	Slight	Well suited	Severe: Wetness	High: Wetness	American elm----- Balsam poplar----- Black ash----- Paper birch----- Red maple----- Silver maple-----	--- --- --- --- --- ---	--- --- --- --- --- ---	Balsam fir, black ash, northern whitecedar, paper birch.
Tawas-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam fir----- Black ash----- Northern white cedar Red maple----- Tamarack----- White spruce-----	61 --- 28 --- 53 ---	--- --- --- --- 25 ---	Tamarack, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
32A: Net-----	Slight	Well suited	Severe: Rooting depth Wetness	High: Wetness	Balsam fir----- Bigtooth aspen----- Eastern hemlock----- Paper birch----- Quaking aspen----- Red maple----- White spruce----- Yellow birch-----	58 --- --- 53 --- 60 49 ---	114 --- --- 57 --- 43 100 ---	Eastern white pine, white spruce.
35A: Beechwood-----	Slight	Well suited	Moderate: Wetness	High: Wetness	American basswood--- American elm----- Balsam fir----- Balsam poplar----- Bigtooth aspen----- Black spruce----- Eastern hemlock----- Northern white cedar Paper birch----- Quaking aspen----- Red maple----- Sugar maple----- White ash----- White spruce----- Yellow birch-----	51 --- 46 --- --- 51 --- --- --- --- 51 --- --- 52 60 ---	--- --- --- --- --- --- --- --- --- --- --- --- --- --- ---	Eastern white pine, red pine, white spruce.
36: Gay-----	Slight	Well suited	Severe: Wetness	High: Wetness	American basswood--- Balsam fir----- Black spruce----- Green ash----- Red maple----- Tamarack----- White spruce-----	51 46 51 52 51 60 60	--- --- --- --- --- --- ---	Eastern white pine, larch, white spruce.
Pleine-----	Slight	Poorly suited: Rock fragments	Severe: Wetness	High: Wetness	Balsam fir----- Balsam poplar----- Black ash----- Northern white cedar Paper birch----- Red maple-----	45 --- --- --- --- ---	83 --- --- --- --- ---	Eastern arborvitae, tamarack.
37B: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Balsam fir----- Eastern hemlock----- Eastern hophornbeam Northern red oak---- Northern white cedar Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White spruce----- Yellow birch-----	66 --- --- --- 73 --- 75 --- 80 63 --- ---	--- --- --- 64 --- 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
37B: Tula-----	Slight	Poorly suited: Rock fragments	Moderate: Wetness Rooting depth	High: Wetness	Balsam fir----- Eastern hemlock----- Eastern white pine-- Quaking aspen----- Red maple----- Sugar maple-----	--- --- --- --- 65 ---	--- --- --- --- 40 ---	Eastern white pine, white spruce.
Lupton-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	Balsam fir----- Black ash----- Black spruce----- Eastern hemlock----- Jack pine----- Northern white cedar Red maple----- Tamarack----- White spruce-----	--- --- 43 --- 55 28 --- 53 ---	--- --- --- --- --- --- --- 25 ---	Tamarack, white spruce.
38B: Gogebic, sandy substratum---	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam Northern red oak--- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
38C: Gogebic, sandy substratum---	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam Northern red oak--- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
38D: Gogebic, sandy substratum---	Slight	Poorly suited: Slope Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam Northern red oak--- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
39B: Gogebic, sandy substratum---	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
39C: Gogebic, sandy substratum---	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
39D: Gogebic, sandy substratum---	Slight	Poorly suited: Slope Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
41: Lupton-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam fir----- Black ash----- Black spruce----- Eastern hemlock----- Jack pine----- Northern white cedar Red maple----- Tamarack----- White spruce-----	--- --- 43 --- 55 28 --- 53 ---	--- --- --- --- --- --- 25 ---	Tamarack, white spruce.
Pleine-----	Slight	Poorly suited: Rock fragments	Severe: Wetness	High: Wetness	Balsam fir----- Balsam poplar----- Black ash----- Northern white cedar Paper birch----- Red maple-----	45 --- --- --- --- ---	86 --- --- --- --- ---	Eastern arborvitae, tamarack.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
41: Cathro-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam fir----- Black ash----- Northern white cedar Paper birch----- Red maple----- Tamarack----- White spruce-----	40 15 15 --- 40 35 ---	72 29 29 --- 29 29 ---	Northern whitecedar, white spruce.
42: Ausable-----	Slight	Poorly suited: Wetness Rock fragments	Moderate: Wetness	High: Wetness	Balsam poplar----- Black ash----- Paper birch----- Red maple-----	--- --- --- ---	--- --- --- ---	Black ash.
Tawas-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam fir----- Black ash----- Northern white cedar Red maple----- Tamarack----- White spruce-----	61 --- 28 --- 53 ---	--- --- --- --- 25 ---	Tamarack, white spruce.
43B: Karlin-----	Slight	Well suited	Slight	Low	Balsam fir----- Black cherry----- Eastern white pine-- Jack pine----- Northern red oak---- Red maple----- Red pine----- Sugar maple-----	--- --- --- --- --- --- 65 61	--- --- --- --- --- --- --- 38	Eastern white pine, jack pine, red pine, white spruce.
Pence-----	Slight	Well suited	Slight	Low	Balsam fir----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine-----	--- 57 --- --- --- --- 59	--- 112 --- --- --- --- 99	Eastern white pine, jack pine, red pine.
43C: Karlin-----	Slight	Well suited	Slight	Low	Balsam fir----- Black cherry----- Eastern white pine-- Jack pine----- Northern red oak---- Red maple----- Red pine----- Sugar maple-----	--- --- --- --- --- --- 65 61	--- --- --- --- --- --- --- 38	Eastern white pine, jack pine, red pine, white spruce.
Pence-----	Slight	Well suited	Slight	Low	Balsam fir----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine-----	--- 57 --- --- --- --- 59	--- 112 --- --- --- --- 99	Eastern white pine, jack pine, red pine.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
43D: Karlin-----	Slight	Poorly suited: Slope	Slight	Low	Balsam fir----- Black cherry----- Eastern white pine-- Jack pine----- Northern red oak---- Red maple----- Red pine----- Sugar maple-----	--- --- --- --- --- --- 65 61	--- --- --- --- --- --- --- 38	Eastern white pine, jack pine, red pine, white spruce.
Pence-----	Slight	Poorly suited: Slope	Slight	Low	Balsam fir----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine-----	--- 57 --- --- --- --- 59	--- 112 --- --- --- --- 99	Eastern white pine, jack pine, red pine.
44B: Karlin-----	Slight	Well suited	Slight	Low	American basswood--- Eastern hemlock----- Northern red oak---- Quaking aspen----- Red pine----- Sugar maple----- Yellow birch-----	66 --- 73 75 80 63 ---	--- --- 64 92 168 42 ---	Eastern white pine, jack pine, red pine, white spruce.
Keweenaw-----	Slight	Well suited	Slight	Moderate: Droughty	Balsam fir----- Black cherry----- Eastern hemlock----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	--- --- --- --- --- --- --- --- 61 ---	--- --- --- --- --- --- --- --- 43 ---	Eastern white pine, jack pine, red pine.
Sarona, dense substratum---	Slight	Well suited	Slight	Low	American basswood--- Northern red oak---- Quaking aspen----- Red pine----- Sugar maple-----	66 73 75 80 63	--- 64 92 168 42	Eastern white pine, red pine, white spruce.
44C: Karlin-----	Slight	Poorly suited: Slope	Slight	Low	American basswood--- Eastern hemlock----- Northern red oak---- Quaking aspen----- Red pine----- Sugar maple----- Yellow birch-----	66 --- 73 75 80 63 ---	--- --- 64 92 168 42 ---	Eastern white pine, jack pine, red pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
44C: Keweenaw-----	Slight	Poorly suited: Slope	Slight	Moderate: Droughty	Balsam fir----- Black cherry----- Eastern hemlock----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	--- --- --- --- --- --- --- --- 61 ---	--- --- --- --- --- --- 43 ---	Eastern white pine, jack pine, red pine.
Sarona, dense substratum---	Slight	Well suited	Slight	Low	American basswood--- Northern red oak--- Quaking aspen----- Red pine----- Sugar maple-----	66 73 75 80 63	--- 64 92 168 42	Eastern white pine, red pine, white spruce.
44D: Karlin-----	Slight	Unsuited: Slope	Slight	Low	American basswood--- Eastern hemlock----- Northern red oak--- Quaking aspen----- Red pine----- Sugar maple----- Yellow birch-----	66 --- 73 75 80 63 ---	--- --- 64 92 168 42 ---	Eastern white pine, jack pine, red pine, white spruce.
Keweenaw-----	Slight	Unsuited: Slope	Slight	Moderate: Droughty	Balsam fir----- Black cherry----- Eastern hemlock----- Eastern white pine-- Northern red oak--- Paper birch----- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	--- --- --- --- --- --- --- --- 61 ---	--- --- --- --- --- --- 43 ---	Eastern white pine, jack pine, red pine.
Sarona, dense substratum---	Slight	Poorly suited: Slope	Slight	Low	American basswood--- Northern red oak--- Quaking aspen----- Red pine----- Sugar maple-----	66 73 75 80 63	--- 64 92 168 42	Eastern white pine, red pine, white spruce.
46C: Amasa-----	Slight	Poorly suited: Rock fragments	Slight	Low	American basswood--- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Ironwood----- Quaking aspen----- Sugar maple----- Yellow birch-----	66 --- --- --- --- 75 63 ---	--- --- --- --- --- 92 42 ---	Scotch pine, eastern white pine, red pine.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
46C: Karlin-----	Slight	Well suited	Slight	Low	American basswood----	66	---	Eastern white pine, red pine.
					Eastern hemlock-----	---	---	
					Northern red oak----	73	64	
					Quaking aspen-----	75	92	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	
46D: Amasa-----	Slight	Poorly suited: Slope Rock fragments	Slight	Low	American basswood----	66	---	Eastern white pine, red pine.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Ironwood-----	---	---	
					Quaking aspen-----	75	92	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	
Karlin-----	Slight	Poorly suited: Slope	Slight	Low	American basswood----	66	---	Eastern white pine, jack pine, red pine, white spruce.
					Eastern hemlock-----	---	---	
					Northern red oak----	73	64	
					Quaking aspen-----	75	92	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	
46E: Amasa-----	Slight	Unsuited: Slope Rock fragments	Slight	Low	American basswood----	66	---	Eastern white pine, red pine.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Ironwood-----	---	---	
					Quaking aspen-----	75	92	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	
Karlin-----	Slight	Unsuited: Slope	Slight	Low	American basswood----	66	---	Eastern white pine, jack pine, red pine, white spruce.
					Eastern hemlock-----	---	---	
					Northern red oak----	73	64	
					Quaking aspen-----	75	92	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	
46F: Amasa-----	Slight	Unsuited: Slope Rock fragments	Slight	Low	American basswood----	66	---	Eastern white pine, red pine.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Quaking aspen-----	75	92	
					Red maple-----	---	---	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
46F: Karlin-----	Slight	Unsuited: Slope	Slight	Low	American basswood----	66	---	Eastern white pine, jack pine, red pine, white spruce.
					Eastern hemlock-----	---	---	
					Northern red oak----	73	64	
					Quaking aspen-----	75	92	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	
47B: Karlin, very deep water table-----	Slight	Well suited	Slight	Low	American basswood----	66	---	Eastern white pine, jack pine, red pine, white spruce.
					Eastern hemlock-----	---	---	
					Northern red oak----	73	64	
					Quaking aspen-----	75	92	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	
Noseum-----	Slight	Well suited	Moderate: Wetness	Low	Balsam fir-----	---	---	Eastern white pine, red pine.
					Bigtooth aspen-----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	51	33	
					Sugar maple-----	---	---	
					Yellow birch-----	---	---	
Gay-----	Slight	Well suited	Severe: Wetness	High: Wetness	American basswood----	51	---	Eastern white pine, larch, white spruce.
					Balsam fir-----	46	---	
					Black spruce-----	51	---	
					Green ash-----	52	---	
					Red maple-----	51	---	
					Tamarack-----	60	---	
					White spruce-----	60	---	
48C: Karlin-----	Slight	Poorly suited: Slope	Slight	Low	American basswood----	66	---	Eastern white pine, jack pine, red pine, white spruce.
					Eastern hemlock-----	---	---	
					Northern red oak----	73	64	
					Quaking aspen-----	75	92	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	
Michigamme----	Slight	Poorly suited: Rock fragments	Slight	Low	American basswood----	68	---	Eastern white pine, red pine.
					Bigtooth aspen-----	---	---	
					Eastern hemlock-----	---	---	
					Eastern white pine--	---	---	
					Ironwood-----	---	---	
					Northern red oak----	---	---	
					Quaking aspen-----	80	95	
					Sugar maple-----	70	46	
					Yellow birch-----	60	43	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
48F: Karlin-----	Slight	Unsuited: Slope	Slight	Low	American basswood----	66	---	Eastern white pine, jack pine, red pine, white spruce.
					Northern red oak----	73	64	
					Quaking aspen-----	75	92	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
Michigamme----	Slight	Unsuited: Slope Rock fragments	Slight	Low	American elm-----	---	---	Eastern white pine, red pine.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Ironwood-----	---	---	
					White ash-----	---	---	
					Yellow birch-----	60	43	
					American basswood----	68	---	
					Quaking aspen-----	80	95	
					Sugar maple-----	70	46	
49B: Pelissier-----	Slight	Well suited	Slight	Low	Jack pine-----	78	80	Eastern white pine, jack pine, red pine.
					Northern red oak----	71	68	
					Quaking aspen-----	77	86	
					Red maple-----	58	35	
					Red pine-----	80	168	
					White spruce-----	61	---	
Sarwet-----	Slight	Poorly suited: Wetness	Moderate: Wetness	Moderate: Wetness	Bigtooth aspen-----	---	---	Eastern white pine, red pine.
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Red maple-----	---	---	
					Yellow birch-----	---	---	
					American basswood----	66	---	
					Quaking aspen-----	75	92	
					Sugar maple-----	63	42	
49C: Pelissier-----	Slight	Poorly suited: Slope	Slight	Low	Jack pine-----	78	80	Eastern white pine, jack pine, red pine.
					Northern red oak----	71	68	
					Quaking aspen-----	77	86	
					Red maple-----	58	35	
					Red pine-----	80	168	
					White spruce-----	61	---	
Sarwet-----	Slight	Poorly suited: Wetness Slope	Moderate: Wetness	Moderate: Wetness	Bigtooth aspen-----	---	---	Eastern white pine, red pine.
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Red maple-----	---	---	
					Yellow birch-----	---	---	
					American basswood----	66	---	
					Quaking aspen-----	75	92	
					Sugar maple-----	63	42	
49D: Pelissier-----	Slight	Poorly suited: Slope	Slight	Low	Jack pine-----	78	80	Eastern white pine, jack pine, red pine.
					Northern red oak----	71	68	
					Quaking aspen-----	77	86	
					Red maple-----	58	35	
					Red pine-----	80	168	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
52B: Pence-----	Slight	Well suited	Slight	Low	Balsam fir----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine-----	--- 57 --- --- --- --- 59	--- 112 --- --- --- --- 99	Eastern white pine, jack pine, red pine.
Vilas-----	Slight	Well suited	Slight	Low	American basswood--- Eastern white pine-- Ironwood----- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash-----	--- --- --- 55 --- 65 45 66 --- ---	--- --- --- --- --- --- 100 --- ---	Eastern white pine, northern red oak, red pine.
52C: Pence-----	Slight	Well suited	Slight	Low	Balsam fir----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine-----	--- 57 --- --- --- --- 59	--- 112 --- --- --- --- 99	Eastern white pine, jack pine, red pine.
Vilas-----	Slight	Well suited	Slight	Low	American basswood--- Eastern white pine-- Ironwood----- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash-----	--- --- --- 55 --- 65 45 66 --- ---	--- --- --- --- --- --- 100 --- ---	Eastern white pine, northern red oak, red pine.
53B: Manitowish----	Slight	Well suited	Moderate: Wetness	Low	Eastern hemlock----- Eastern white pine-- Quaking aspen----- Red maple----- Red pine----- Sugar maple-----	--- --- --- --- 59 60	--- --- --- --- 100 43	Eastern white pine, jack pine, red pine.
Croswell-----	Slight	Well suited	Moderate: Wetness	Moderate: Droughty	Jack pine----- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- White spruce-----	78 71 77 58 80 61	80 68 86 35 168 ---	Eastern white pine, jack pine, northern red oak, red pine.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
57B: Karlin-----	Slight	Well suited	Slight	Low	Jack pine----- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- White spruce-----	78 71 77 58 80 61	80 68 86 35 168 ---	Eastern white pine, jack pine, red pine, white spruce.
Manitowish----	Slight	Well suited	Moderate: Wetness	Low	Eastern hemlock----- Eastern white pine-- Quaking aspen----- Red maple----- Red pine----- Sugar maple-----	--- --- --- --- 59 60	--- --- --- --- 100 43	Eastern white pine, jack pine, red pine.
57C: Karlin-----	Slight	Well suited	Slight	Low	Jack pine----- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- White spruce-----	78 71 77 58 80 61	80 68 86 35 168 ---	Eastern white pine, jack pine, red pine, white spruce.
Manitowish----	Slight	Well suited	Moderate: Wetness	Low	Eastern hemlock----- Eastern white pine-- Quaking aspen----- Red maple----- Red pine----- Sugar maple-----	--- --- --- --- 59 60	--- --- --- --- 100 43	Eastern white pine, jack pine, red pine.
58B: Vilas, very deep water table-----	Slight	Well suited	Slight	Low	Balsam fir----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine----- Sugar maple-----	--- --- 55 --- 65 45 66 ---	--- --- --- --- --- --- 100 ---	Eastern white pine, northern red oak, red pine.
Croswell-----	Slight	Well suited	Moderate: Wetness	Moderate: Droughty	Jack pine----- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- White spruce-----	78 71 77 58 80 61	80 68 86 35 168 ---	Eastern white pine, jack pine, northern red oak, red pine.
Pence, very deep water table-----	Slight	Well suited	Slight	Low	Balsam fir----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine-----	--- 57 --- --- --- --- 59	--- 112 --- --- --- --- 99	Eastern white pine, jack pine, red pine.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
61: Tawas-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam fir----- Black ash----- Northern white cedar Red maple----- Tamarack----- White spruce-----	61 --- 28 --- 53 ---	--- --- --- 25 ---	Tamarack, white spruce.
Kinross-----	Slight	Well suited	Severe: Wetness	High: Wetness	Balsam fir----- Black spruce----- Eastern white pine-- Jack pine----- Paper birch----- Quaking aspen----- Red maple----- Tamarack-----	--- --- --- --- --- 45 --- ---	--- --- --- --- --- 32 --- ---	Tamarack, white spruce.
62B: Pelkie-----	Slight	Well suited	Slight	Moderate: Droughty	American basswood--- American elm----- Red maple----- Sugar maple----- White spruce----- Yellow birch-----	--- --- --- 65 --- ---	--- --- --- 43 --- ---	Norway spruce, red pine, white spruce.
83: Bowstring----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam poplar----- Black ash----- Paper birch----- Red maple----- Silver maple-----	--- --- --- --- ---	--- --- --- --- ---	Black ash.
141D: Oldman-----	Slight	Poorly suited: Wetness Rock fragments	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Green ash----- Northern red oak----- Quaking aspen----- Sugar maple----- Yellow birch-----	84 --- 63 --- --- 66 ---	86 --- 40 --- --- 41 ---	Eastern white pine, red pine.
141E: Oldman-----	Slight	Poorly suited: Slope Wetness Rock fragments	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Green ash----- Northern red oak----- Quaking aspen----- Sugar maple----- Yellow birch-----	84 --- 63 --- --- 66 ---	86 --- 40 --- --- 41 ---	Eastern white pine, red pine.
141F: Porkies-----	Slight	Unsuited: Slope	Slight	Low	American basswood--- Bigtooth aspen----- Eastern hemlock----- Eastern white pine-- Green ash----- Quaking aspen----- Sugar maple-----	71 --- --- --- --- --- 61	67 --- --- --- --- --- 38	Eastern white pine, red pine.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
214B: Amnicon-----	Slight	Poorly suited: Wetness Stickiness (high plasticity index)	Severe: Wetness Rooting depth	High: Wetness	Balsam fir----- Eastern white pine-- Paper birch----- Quaking aspen----- Red maple----- Red pine----- White spruce-----	51 44 56 63 55 46 37	100 72 57 72 29 72 57	Eastern white pine, white spruce.
Bergland-----	Slight	Poorly suited: Wetness Stickiness (high plasticity index)	Severe: Wetness Rooting depth	High: Wetness	Balsam fir----- Black ash----- Northern white cedar Paper birch----- Quaking aspen----- Red maple----- Tamarack----- White spruce-----	45 --- --- --- 74 --- --- 45	86 --- --- --- 86 --- --- 86	Eastern white pine, white spruce.
216B: Amnicon-----	Slight	Poorly suited: Wetness Stickiness (high plasticity index)	Severe: Wetness Rooting depth	High: Wetness	Balsam fir----- Eastern white pine-- Paper birch----- Quaking aspen----- Red maple----- Red pine----- White spruce-----	51 44 56 63 55 46 37	100 72 57 72 29 72 57	Eastern white pine, white spruce.
217A: Cuttre-----	Slight	Poorly suited: Stickiness (high plasticity index)	Severe: Wetness Rooting depth	High: Wetness	Balsam fir----- Green ash----- Northern white cedar Paper birch----- Quaking aspen----- Red maple----- Sugar maple----- White spruce----- Yellow birch-----	45 --- --- 49 --- 53 --- --- ---	29 --- --- 48 --- 34 --- --- ---	Eastern white pine, white spruce.
218: Bergland-----	Slight	Poorly suited: Wetness Stickiness (high plasticity index)	Severe: Wetness Rooting depth	High: Wetness	Balsam fir----- Black ash----- Northern white cedar Paper birch----- Quaking aspen----- Red maple----- Tamarack----- White spruce-----	45 --- --- --- 74 --- --- 45	86 --- --- --- 86 --- --- 86	Eastern white pine, white spruce.
219B: Payseor-----	Slight	Poorly suited: Stickiness (high plasticity index)	Severe: Wetness Rooting depth	High: Wetness	Balsam fir----- Green ash----- Northern white cedar Paper birch----- Quaking aspen----- Red maple----- Sugar maple----- White spruce----- Yellow birch-----	45 --- --- 49 --- 53 --- --- ---	29 --- --- 48 --- 34 --- --- ---	Eastern white pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
219B: Froberg-----	Slight	Poorly suited: Stickiness (high plasticity index)	Severe: Wetness Rooting depth	Low	Balsam fir----- Eastern hemlock----- Quaking aspen----- Red maple----- Sugar maple----- White spruce----- Yellow birch-----	--- --- --- --- 60 --- ---	--- --- --- --- 43 --- ---	Norway spruce, eastern white pine, white spruce.
222: Matchwood-----	Slight	Poorly suited: Stickiness (high plasticity index)	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Balsam fir----- Black ash----- Northern white cedar Paper birch----- Quaking aspen----- Red maple----- Tamarack----- White spruce-----	--- 45 --- --- --- 74 --- --- 45	--- 86 --- --- --- 86 --- 86	White spruce.
225A: Cuttre-----	Slight	Poorly suited: Stickiness (high plasticity index)	Severe: Wetness Rooting depth	High: Wetness	Balsam fir----- Green ash----- Northern white cedar Paper birch----- Quaking aspen----- Red maple----- Sugar maple----- White spruce----- Yellow birch-----	45 --- --- 49 --- 53 --- --- ---	83 --- --- 48 --- 34 --- --- ---	Eastern white pine, white spruce.
Bergland-----	Slight	Poorly suited: Wetness Rooting depth Stickiness (high plasticity index)	Severe: Wetness Rooting depth	High: Wetness	Balsam fir----- Black ash----- Northern white cedar Paper birch----- Quaking aspen----- Red maple----- Tamarack----- White spruce-----	45 --- --- --- 74 --- --- 45	86 --- --- --- 86 --- --- 86	Eastern white pine, white spruce.
226B: Froberg-----	Slight	Poorly suited: Stickiness (high plasticity index)	Severe: Wetness Rooting depth	Low	Balsam fir----- Eastern hemlock----- Quaking aspen----- Red maple----- Sugar maple----- White spruce----- Yellow birch-----	--- --- --- --- 60 --- ---	--- --- --- --- 43 --- ---	Norway spruce, eastern white pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
230B: Moquah-----	Slight	Well suited	Slight	Low	Basswood----- Eastern white pine-- Green ash----- Quaking aspen----- Red maple----- Slippery elm----- Sugar maple----- White spruce-----	--- --- --- --- 60 --- --- ---	--- --- --- --- 38 --- --- ---	Eastern white pine, white spruce.
Arnheim-----	Slight	Well suited	Severe: Wetness	High: Wetness	Balsam fir----- Black ash----- Green ash----- Northern white cedar Paper birch----- Quaking aspen----- Red maple----- Tamarack----- White spruce----- Yellow birch-----	--- --- --- --- --- --- --- --- 38 ---	--- --- --- --- --- --- --- --- 72 ---	Northern whitecedar, white spruce.
231: Matchwood-----	Slight	Poorly suited: Stickiness (high plasticity index)	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Balsam fir----- Black ash----- Northern white cedar Paper birch----- Quaking aspen----- Red maple----- Tamarack----- White spruce-----	--- 45 --- --- --- 74 --- --- --- 45	--- 86 --- --- --- 86 --- --- 86	White spruce.
Dorval-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam fir----- Black spruce----- Northern white cedar Paper birch----- Red maple----- Tamarack----- White spruce-----	40 15 15 --- 40 35 ---	72 29 29 --- 29 29 ---	Balsam fir, black ash, northern whitecedar, paper birch.
233: Schaat Creek--	Slight	Well suited	Moderate: Wetness	High: Wetness	American basswood--- Balsam fir----- Black ash----- Northern white cedar Paper birch----- Quaking aspen----- Red maple----- Tamarack----- White spruce-----	--- 45 --- --- --- 74 --- --- --- 45	--- 86 --- --- --- 86 --- --- 86	Eastern white pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
239D: Miskoaki-----	Slight	Poorly suited: Slope Stickiness (high plasticity index)	Severe: Rooting depth	Low	Eastern white pine-- Paper birch----- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White spruce-----	--- --- --- --- --- 62 ---	--- --- --- --- --- 39 ---	Eastern white pine, white spruce.
277B: Kellogg, sandy substratum---	Slight	Well suited	Moderate: Wetness	Moderate: Droughty	American basswood--- Bigtooth aspen----- Eastern hemlock----- Eastern white pine-- Green ash----- Northern red oak---- Red maple----- Red pine----- Sugar maple-----	--- 74 --- --- --- 56 --- --- 67	--- 86 --- --- --- 43 --- --- 43	Eastern white pine, red pine.
Allendale-----	Slight	Well suited	Moderate: Wetness	High: Wetness	Balsam fir----- Eastern white pine-- Paper birch----- Quaking aspen----- Red maple----- White ash----- White spruce-----	--- --- --- 60 --- --- ---	--- --- --- 57 --- --- ---	Eastern white pine, white spruce.
280B: Flintsteel----	Slight	Well suited	Moderate: Wetness	Moderate: Wetness	American basswood--- Balsam fir----- Basswood----- Eastern hemlock----- Green ash----- Ironwood----- Northern white cedar Quaking aspen----- Red maple----- Sugar maple----- White ash----- Yellow birch-----	65 --- --- --- --- --- --- --- --- 59 67 ---	57 --- --- --- --- --- --- --- --- 37 60 ---	Eastern white pine, red pine, white spruce.
280C: Flintsteel----	Slight	Well suited	Moderate: Wetness	Moderate: Wetness	American basswood--- Balsam fir----- Basswood----- Eastern hemlock----- Green ash----- Ironwood----- Northern white cedar Quaking aspen----- Red maple----- Sugar maple----- White ash----- Yellow birch-----	65 --- --- --- --- --- --- --- --- 59 67 ---	--- --- --- --- --- --- --- --- --- --- --- ---	Eastern white pine, red pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
282B: Big Iron-----	Slight	Well suited	Moderate: Wetness	High: Wetness	American basswood---	72	69	Eastern white pine, white spruce.
					Eastern hemlock-----	---	---	
					Eastern hophornbeam---	---	---	
					Green ash-----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	63	39	
					Sugar maple-----	54	34	
					Yellow birch-----	---	---	
Flintsteel----	Slight	Well suited	Moderate: Wetness	Moderate: Wetness	American basswood---	65	59	Eastern white pine, green ash, white spruce.
					Balsam fir-----	---	---	
					Basswood-----	---	---	
					Eastern hemlock-----	---	---	
					Green ash-----	---	---	
					Ironwood-----	---	---	
					Northern white cedar---	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Sugar maple-----	59	37	
					White ash-----	67	61	
					Yellow birch-----	---	---	
283B: Loggerhead----	Slight	Poorly suited: Wetness	Moderate: Wetness	Moderate: Wetness	American basswood---	---	---	Eastern white pine, red pine, white spruce.
					Balsam fir-----	---	---	
					Eastern hemlock-----	---	---	
					Green ash-----	---	---	
					Quaking aspen-----	80	94	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
					Yellow birch-----	---	---	
Noseum-----	Slight	Well suited	Moderate: Wetness	Low	Balsam fir-----	---	---	Eastern white pine, red pine.
					Bigtooth aspen-----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	51	33	
					Sugar maple-----	---	---	
					Yellow birch-----	---	---	
Ubly-----	Slight	Well suited	Slight	Low	American basswood---	---	---	Eastern white pine, red pine, sugar maple.
					Hemlock-----	---	---	
					Red maple-----	71	---	
					Sugar maple-----	67	---	
					Yellow birch-----	66	---	
283C: Loggerhead----	Slight	Poorly suited: Wetness	Moderate: Wetness	Moderate: Wetness	American basswood---	---	---	Eastern white pine, red pine, white spruce.
					Balsam fir-----	---	---	
					Eastern hemlock-----	---	---	
					Green ash-----	---	---	
					Quaking aspen-----	80	94	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
					Yellow birch-----	---	---	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
283C: Noseum-----	Slight	Well suited	Moderate: Wetness	Low	Balsam fir----- Bigtooth aspen----- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	--- --- --- 51 --- ---	--- --- --- 33 --- ---	Eastern white pine, red pine.
Ubly-----	Slight	Well suited	Slight	Low	American basswood--- Hemlock----- Red maple----- Sugar maple----- Yellow birch-----	--- --- 71 67 66	--- --- --- --- ---	Eastern white pine, red pine, sugar maple.
284: Aguents.								
Gull Point----	Slight	Well suited	Moderate: Wetness	High: Wetness	Balsam fir----- Black ash----- Black spruce----- Green ash----- Quaking aspen-----	--- 63 --- 72 83	--- 39 --- 44 98	Northern whitecedar, tamarack.
285F: Rockland-----	Slight	Unsuited: Slope	Slight	Low	Balsam fir----- Eastern hemlock----- Eastern white pine-- Green ash----- Quaking aspen----- Sugar maple----- White spruce-----	--- --- --- --- --- 61 ---	--- --- --- --- --- 38 ---	Eastern white pine, red pine, white spruce.
Arnheim-----	Slight	Well suited	Severe: Wetness	High: Wetness	Balsam fir----- Black ash----- Green ash----- Northern white cedar Paper birch----- Quaking aspen----- Red maple----- Tamarack----- White spruce----- Yellow birch-----	--- --- --- --- --- --- --- --- 38 ---	--- --- --- --- --- --- --- --- 72 ---	Northern whitecedar, white spruce.
286A: Big Iron-----	Slight	Well suited	Moderate: Wetness	High: Wetness	American basswood--- Black ash----- Eastern hemlock----- Eastern hophornbeam Green ash----- Quaking aspen----- Red maple----- Sugar maple----- White ash----- Yellow birch-----	72 57 --- --- --- --- 63 54 55 ---	69 36 --- --- --- --- 39 34 42 ---	Eastern white pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
286A: Belding-----	Slight	Well suited	Moderate: Wetness	High: Wetness	Balsam fir----- Northern red oak---- Paper birch----- Quaking aspen----- Red pine----- Sugar maple----- Yellow birch-----	55 65 58 65 --- --- ---	114 57 57 72 --- --- ---	Eastern white pine, white spruce.
287: Trap Falls----	Slight	Well suited	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Balsam fir----- Black ash----- Green ash----- Northern white cedar Paper birch----- Quaking aspen----- Red maple----- Speckled alder----- White spruce----- Yellow birch-----	--- --- 63 72 --- --- 83 --- --- --- ---	--- --- 39 69 --- --- 98 --- --- --- ---	Eastern white pine, green ash, white spruce.
Tonkey-----	Slight	Unsuited: Wetness	Severe: Wetness	High: Wetness	American basswood--- Balsam fir----- Northern white cedar Quaking aspen----- Red maple-----	55 --- --- 61 ---	43 --- --- 72 ---	Tamarack, white spruce.
289B: Amasa-----	Slight	Poorly suited: Rock fragments	Slight	Low	American basswood--- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Ironwood----- Quaking aspen----- Sugar maple----- Yellow birch-----	66 --- --- --- --- 75 63 ---	--- --- --- --- --- 92 42 ---	Eastern white pine, red pine.
290B: Flintsteel----	Slight	Well suited	Moderate: Wetness	Moderate: Wetness	American basswood--- Balsam fir----- Basswood----- Eastern hemlock----- Green ash----- Ironwood----- Northern white cedar Quaking aspen----- Red maple----- Sugar maple----- White ash----- Yellow birch-----	65 --- --- --- --- --- --- --- --- 59 67 ---	57 --- --- --- --- --- --- --- --- 37 60 ---	Eastern white pine, green ash, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
290C: Flintsteel----	Slight	Well suited	Moderate: Wetness	Moderate: Wetness	American basswood---	65	57	Eastern white pine, green ash, white spruce.
					Balsam fir-----	---	---	
					Basswood-----	---	---	
					Eastern hemlock----	---	---	
					Green ash-----	---	---	
					Ironwood-----	---	---	
					Northern white cedar	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Sugar maple-----	59	37	
					White ash-----	67	60	
					Yellow birch-----	---	---	
291B: Kalkaska-----	Slight	Well suited	Slight	Low	Bigtooth aspen-----	80	100	Eastern white pine, red pine.
					Eastern white pine--	---	---	
					Northern red oak----	---	---	
					Paper birch-----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	63	43	
					Red pine-----	---	---	
					Sugar maple-----	64	43	
291D: Kalkaska-----	Slight	Well suited	Slight	Low	Bigtooth aspen-----	80	100	Eastern white pine, red pine.
					Eastern white pine--	---	---	
					Northern red oak----	---	---	
					Paper birch-----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	63	43	
					Red pine-----	---	---	
					Sugar maple-----	64	43	
292B: Manido-----	Slight	Well suited	Moderate: Wetness	Low	Balsam fir-----	---	---	Eastern white pine, red pine, white spruce.
					Eastern hemlock----	---	---	
					Red maple-----	51	33	
					Sugar maple-----	---	---	
					White spruce-----	---	---	
					Yellow birch-----	---	---	
Richter-----	Slight	Well suited	Moderate: Wetness	High: Wetness	American basswood---	---	---	Eastern white pine, red pine, white spruce.
					Bigtooth aspen-----	---	---	
					Black ash-----	---	---	
					Eastern hemlock----	---	---	
					Eastern hophornbeam	---	---	
					Eastern white pine--	---	---	
					Northern white cedar	---	---	
					Quaking aspen-----	70	86	
					Red maple-----	65	43	
					Sugar maple-----	---	---	
					White spruce-----	51	72	
					Yellow birch-----	---	---	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
293A: Wainola-----	Slight	Well suited	Moderate: Wetness	High: Wetness	Balsam fir----- Bigtooth aspen----- Eastern hemlock----- Eastern white pine-- Jack pine----- Northern white cedar Paper birch----- Quaking aspen----- Red maple----- Yellow birch-----	--- --- --- --- 51 --- --- 70 65 ---	--- --- --- 72 --- --- 86 43 ---	Eastern white pine, red pine, white spruce.
Trap Falls----	Slight	Well suited	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Balsam fir----- Black ash----- Green ash----- Northern white cedar Paper birch----- Quaking aspen----- Red maple----- Speckled alder----- White spruce----- Yellow birch-----	--- --- 63 72 --- --- 83 --- --- --- ---	--- --- 39 69 --- --- 98 --- --- --- ---	Eastern white pine, green ash, white spruce.
296B: Manido-----	Slight	Well suited	Moderate: Wetness	Low	Balsam fir----- Eastern hemlock----- Red maple----- Sugar maple----- White spruce----- Yellow birch-----	--- --- 51 --- --- ---	--- --- 33 --- --- ---	Eastern white pine, red pine, white spruce.
Fence-----	Slight	Well suited	Moderate: Wetness	Low	American basswood--- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	--- --- --- --- --- --- 65 ---	--- --- --- --- --- --- 40 ---	Eastern white pine, red pine, white spruce.
Gogebic, sandy substratum---	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam Northern red oak--- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
296D: Manido-----	Slight	Poorly suited: Slope	Moderate: Wetness	Low	Balsam fir----- Eastern hemlock----- Red maple----- Sugar maple----- White spruce----- Yellow birch-----	--- --- 51 --- --- ---	--- --- 33 --- --- ---	Eastern white pine, red pine, white spruce.
Sporley-----	Severe: Slope	Poorly suited: Slope	Slight	Low	Bigtooth aspen----- Northern red oak----- Red maple----- Sugar maple----- Yellow birch-----	--- 73 --- 63 ---	--- 64 --- 42 ---	Eastern white pine, red pine, white spruce.
Gogebic, sandy substratum---	Slight	Poorly suited: Slope Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Northern red oak--- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
299B: Zandi-----	Slight	Well suited	Slight	Low	American basswood--- Eastern white pine--- Northern red oak--- Red maple----- Red pine----- Sugar maple----- Yellow birch-----	--- --- --- --- --- 61 ---	--- --- --- --- --- 43 ---	Eastern white pine, red pine.
Amasa-----	Slight	Well suited	Slight	Low	American basswood--- American elm----- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Ironwood----- Quaking aspen----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- --- --- --- 75 63 --- ---	--- --- --- --- --- --- 92 42 --- ---	Eastern white pine, red pine.
Flintsteel----	Slight	Well suited	Moderate: Wetness	Moderate: Wetness	American basswood--- Balsam fir----- Basswood----- Eastern hemlock----- Green ash----- Ironwood----- Northern white cedar--- Quaking aspen----- Red maple----- Sugar maple----- White ash----- Yellow birch-----	65 --- --- --- --- --- --- --- --- 59 67 ---	57 --- --- --- --- --- --- --- --- 37 60 ---	Eastern white pine, green ash, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
299C: Zandi-----	Slight	Well suited	Slight	Low	American basswood----	---	---	Eastern white pine, red pine.
					Eastern white pine--	---	---	
					Northern red oak----	---	---	
					Red maple-----	---	---	
					Red pine-----	---	---	
					Sugar maple-----	61	43	
					Yellow birch-----	---	---	
Amasa-----	Slight	Well suited	Slight	Low	American basswood----	66	---	Eastern white pine, red pine.
					American elm-----	---	---	
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Ironwood-----	---	---	
					Quaking aspen-----	75	92	
					Sugar maple-----	63	42	
					White ash-----	---	---	
					Yellow birch-----	---	---	
Flintsteel----	Slight	Well suited	Moderate: Wetness	Moderate: Wetness	American basswood----	65	57	Eastern white pine, green ash, white spruce.
					Balsam fir-----	---	---	
					Basswood-----	---	---	
					Eastern hemlock-----	---	---	
					Green ash-----	---	---	
					Ironwood-----	---	---	
					Northern white cedar	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Sugar maple-----	59	37	
					White ash-----	67	60	
					Yellow birch-----	---	---	
301A: Moodig-----	Slight	Well suited	Moderate: Wetness	High: Wetness	American elm-----	---	---	Eastern white pine, white spruce.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hophornbeam	---	---	
					Ironwood-----	---	---	
					White ash-----	---	---	
					Yellow birch-----	---	---	
					American basswood----	68	---	
					Quaking aspen-----	80	95	
					Sugar maple-----	70	46	
302B: Manitowish----	Slight	Well suited	Moderate: Wetness	Low	Eastern hemlock-----	---	---	Eastern white pine, jack pine, red pine.
					Eastern white pine--	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Red pine-----	59	100	
					Sugar maple-----	60	43	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
302C: Manitowish----	Slight	Well suited	Moderate: Wetness	Low	Eastern hemlock----- Eastern white pine-- Quaking aspen----- Red maple----- Red pine----- Sugar maple-----	--- --- --- --- 59 60	--- --- --- --- 100 43	Eastern white pine, jack pine, red pine.
303: Bowstring-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	American elm----- Balsam poplar----- Black ash----- Paper birch----- Red maple----- Silver maple-----	--- --- --- --- --- ---	--- --- --- --- --- ---	Black ash, red maple, silver maple, paper birch.
Arnheim-----	Slight	Well suited	Severe: Wetness	High: Wetness	Balsam fir----- Black ash----- Green ash----- Northern white cedar Paper birch----- Quaking aspen----- Red maple----- Tamarack----- White spruce----- Yellow birch-----	--- --- --- --- --- --- --- --- 38 ---	--- --- --- --- --- --- --- --- 72 ---	Northern whitecedar, white spruce.
305B: Keweenaw-----	Slight	Well suited	Slight	Moderate: Droughty	Balsam fir----- Black cherry----- Eastern hemlock----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	--- --- --- --- --- --- --- --- 61 ---	--- --- --- --- --- --- --- --- 43 ---	Eastern white pine, jack pine, red pine.
Siskiwit-----	Slight	Well suited	Moderate: Wetness	Low	Balsam fir----- Basswood----- Hemlock----- Northern red oak---- Red maple----- Sugar maple-----	--- --- --- --- --- 67	--- --- --- --- --- 41	Eastern white pine, jack pine, red pine, white spruce.
305C: Keweenaw-----	Slight	Well suited	Slight	Moderate: Droughty	Balsam fir----- Black cherry----- Eastern hemlock----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	--- --- --- --- --- --- --- --- 61 ---	--- --- --- --- --- --- --- --- 43 ---	Eastern white pine, jack pine, red pine.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
305C: Siskiwit-----	Slight	Well suited	Moderate: Wetness	Low	Balsam fir----- Basswood----- Hemlock----- Northern red oak---- Red maple----- Sugar maple-----	--- --- --- --- --- 67	--- --- --- --- --- 41	Eastern white pine, jack pine, red pine, white spruce.
307: Lupton-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam fir----- Black ash----- Black spruce----- Eastern hemlock----- Jack pine----- Northern white cedar Red maple----- Tamarack----- White spruce-----	--- --- 43 --- 55 28 --- 53 ---	--- --- --- --- --- --- --- 25 ---	Tamarack, white spruce.
Cathro-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam fir----- Black ash----- Northern white cedar Paper birch----- Red maple----- Tamarack----- White spruce-----	40 15 15 --- 40 35 ---	72 29 29 --- 29 29 ---	Northern whitecedar, white spruce.
309: Cathro-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam fir----- Black ash----- Northern white cedar Paper birch----- Red maple----- Tamarack----- White spruce-----	40 15 15 --- 40 35 ---	72 29 29 --- 29 29 ---	Northern whitecedar, white spruce.
310B: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
310C: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
310D: Gogebic-----	Slight	Poorly suited: Slope Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
310E: Schweitzer----	Slight	Unsuited: Slope Rock fragments	Severe: Rooting depth	Low	American basswood--- Balsam fir----- Eastern hemlock----- Eastern hophornbeam--- Eastern white pine-- Northern red oak---- Quaking aspen----- Red maple----- Sugar maple-----	--- --- --- --- --- --- --- --- 64	--- --- --- --- --- --- --- 40	Eastern white pine, red pine.
311B: Tula-----	Slight	Poorly suited: Rock fragments	Moderate: Wetness Rooting depth	High: Wetness	Balsam fir----- Eastern hemlock----- Eastern white pine-- Quaking aspen----- Red maple----- Sugar maple-----	--- --- --- --- 65 ---	--- --- --- 40 ---	Eastern white pine, white spruce.
Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
312A: Tula-----	Slight	Poorly suited: Rock fragments	Moderate: Wetness Rooting depth	High: Wetness	Balsam fir----- Eastern hemlock----- Eastern white pine-- Quaking aspen----- Red maple----- Sugar maple-----	--- --- --- --- 65 ---	--- --- --- --- 40 ---	Eastern white pine, white spruce.
Foxpaw-----	Slight	Well suited	Severe: Wetness	High: Wetness	Balsam poplar----- Bigtooth aspen----- Black ash----- Green ash----- Quaking aspen----- Red maple----- Sugar maple-----	--- --- --- --- --- 54 ---	--- --- --- --- --- --- ---	Eastern white pine, larch, white spruce.
Gay-----	Slight	Well suited	Severe: Wetness	High: Wetness	American basswood--- Balsam fir----- Black spruce----- Green ash----- Red maple----- Tamarack----- White spruce-----	51 46 51 52 51 60 60	--- --- --- --- --- --- ---	Eastern white pine, larch, white spruce.
316: Gay-----	Slight	Well suited	Severe: Wetness	High: Wetness	American basswood--- Balsam fir----- Black spruce----- Green ash----- Red maple----- Tamarack----- White spruce-----	51 46 51 52 51 60 60	--- --- --- --- --- --- ---	Eastern white pine, larch, white spruce.
317B: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam Green ash----- Northern red oak--- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- Yellow birch-----	66 --- --- --- 73 75 --- 80 63 ---	--- --- --- --- 64 92 --- 168 42 ---	Eastern white pine, red pine, white spruce.
317C: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam Green ash----- Northern red oak--- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- Yellow birch-----	66 --- --- --- 73 75 --- 80 63 ---	--- --- --- --- 64 92 --- 168 42 ---	Eastern white pine, red pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
317D: Gogebic-----	Slight	Poorly suited: Slope Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Green ash----- Northern red oak----- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- Yellow birch-----	66 --- --- --- 73 75 --- 80 63 ---	--- --- --- --- 64 92 --- 168 42 ---	Eastern white pine, red pine, white spruce.
319B: McMillan-----	Slight	Well suited	Slight	Low	American basswood--- Bigtooth aspen----- Eastern hemlock----- Eastern hophornbeam--- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	66 --- --- --- 75 --- 63 ---	--- --- --- 92 --- --- 42 ---	Eastern white pine, jack pine, red pine.
Noseum-----	Slight	Well suited	Moderate: Wetness	Low	Balsam fir----- Bigtooth aspen----- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	--- --- --- 51 --- ---	--- --- --- 33 --- ---	Eastern white pine, red pine.
319C: McMillan-----	Slight	Well suited	Slight	Low	American basswood--- Bigtooth aspen----- Eastern hemlock----- Eastern hophornbeam--- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	66 --- --- --- 75 --- 63 ---	--- --- --- 92 --- --- 42 ---	Eastern white pine, jack pine, red pine.
Islandlake----	Slight	Well suited	Slight	Low	American beech----- Bigtooth aspen----- Eastern hemlock----- Eastern white pine-- Paper birch----- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- Yellow birch-----	--- --- --- --- --- --- --- 73 60 ---	--- --- --- --- --- --- --- 136 38 ---	Eastern white pine, jack pine, red pine.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
319D: McMillan-----	Slight	Poorly suited: Slope	Slight	Low	American basswood----	66	---	Eastern white pine, jack pine, red pine.
					Bigtooth aspen-----	---	---	
					Eastern hemlock-----	---	---	
					Eastern hophornbeam----	---	---	
					Quaking aspen-----	75	92	
					Red maple-----	---	---	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	
Islandlake----	Slight	Poorly suited: Slope	Slight	Low	American beech-----	---	---	Eastern white pine, jack pine, red pine.
					Bigtooth aspen-----	---	---	
					Eastern hemlock-----	---	---	
					Eastern white pine--	---	---	
					Paper birch-----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Red pine-----	73	136	
					Sugar maple-----	60	38	
					Yellow birch-----	---	---	
319E: McMillan-----	Slight	Unsuited: Slope	Slight	Low	American basswood----	66	---	Eastern white pine, jack pine, red pine.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Quaking aspen-----	75	92	
					Red maple-----	---	---	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	
Islandlake----	Slight	Unsuited: Slope	Slight	Low	American beech-----	---	---	Eastern white pine, jack pine, red pine.
					Bigtooth aspen-----	---	---	
					Eastern hemlock-----	---	---	
					Eastern white pine--	---	---	
					Paper birch-----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Red pine-----	73	136	
					Sugar maple-----	60	38	
					Yellow birch-----	---	---	
322B: Stutts-----	Slight	Well suited	Slight	Low	Eastern hemlock-----	---	---	Eastern white pine, jack pine, red pine.
					Eastern white pine--	---	---	
					Jack pine-----	78	80	
					Northern red oak----	71	68	
					Paper birch-----	---	---	
					Quaking aspen-----	77	86	
					Red pine-----	80	168	
					Sugar maple-----	---	---	
					Yellow birch-----	---	---	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
322B: Keweenaw-----	Slight	Well suited	Slight	Moderate: Droughty	Balsam fir----- Black cherry----- Eastern hemlock----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	--- --- --- --- --- --- --- --- 61 ---	--- --- --- --- --- --- --- --- 43 ---	Eastern white pine, jack pine, red pine.
322C: Stutts-----	Slight	Well suited	Slight	Low	Eastern hemlock----- Eastern white pine-- Jack pine----- Northern red oak---- Paper birch----- Quaking aspen----- Red pine----- Sugar maple----- Yellow birch-----	--- --- 78 71 --- 77 80 --- ---	--- --- 80 68 --- 86 168 --- ---	Eastern white pine, jack pine, red pine.
Keweenaw-----	Slight	Well suited	Slight	Moderate: Droughty	Balsam fir----- Black cherry----- Eastern hemlock----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	--- --- --- --- --- --- --- --- 61 ---	--- --- --- --- --- --- --- --- 43 ---	Eastern white pine, jack pine, red pine.
322D: Stutts-----	Slight	Poorly suited: Slope	Slight	Low	Eastern hemlock----- Eastern white pine-- Jack pine----- Northern red oak---- Paper birch----- Quaking aspen----- Red pine----- Sugar maple----- Yellow birch-----	--- --- 78 71 --- 77 80 --- ---	--- --- 80 68 --- 86 168 --- ---	Eastern white pine, jack pine, red pine.
Keweenaw-----	Slight	Poorly suited: Slope	Slight	Moderate: Droughty	Balsam fir----- Black cherry----- Eastern hemlock----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	--- --- --- --- --- --- --- --- 61 ---	--- --- --- --- --- --- --- --- 43 ---	Eastern white pine, jack pine, red pine.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
323B: Keweenaw-----	Slight	Well suited	Slight	Moderate: Droughty	Balsam fir----- Black cherry----- Eastern hemlock----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	--- --- --- --- --- --- --- 61 ---	--- --- --- --- --- 43 ---	Eastern white pine, jack pine, red pine, white spruce.
Kalkaska-----	Slight	Well suited	Slight	Low	Bigtooth aspen----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine----- Sugar maple-----	80 --- --- --- --- 63 --- 64	100 --- --- --- --- 43 ---	Eastern white pine, red pine.
323C: Keweenaw-----	Slight	Well suited	Slight	Moderate: Droughty	Balsam fir----- Black cherry----- Eastern hemlock----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	--- --- --- --- --- --- --- 61 ---	--- --- --- --- --- 43 ---	Eastern white pine, jack pine, red pine, white spruce.
Kalkaska-----	Slight	Well suited	Slight	Low	Bigtooth aspen----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine----- Sugar maple-----	80 --- --- --- --- 63 --- 64	100 --- --- --- --- 43 ---	Eastern white pine, red pine.
323D: Keweenaw-----	Slight	Poorly suited: Slope	Slight	Moderate: Droughty	Balsam fir----- Black cherry----- Eastern hemlock----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	--- --- --- --- --- --- --- 61 ---	--- --- --- --- --- 43 ---	Eastern white pine, jack pine, red pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
323D: Kalkaska-----	Slight	Poorly suited: Slope	Slight	Low	Bigtooth aspen----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine----- Sugar maple-----	80 --- --- --- --- 63 --- 64	100 --- --- --- --- 43 --- 43	Eastern white pine, red pine.
325B: Siskiwit-----	Slight	Well suited	Moderate: Wetness	Low	Balsam fir----- Basswood----- Red maple----- Sugar maple----- White ash----- White spruce-----	--- --- --- 67 --- ---	--- --- --- 41 --- ---	Eastern white pine, jack pine, red pine, white spruce.
Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock---- Eastern hophornbeam Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
325C: Siskiwit-----	Slight	Well suited	Moderate: Wetness	Low	Balsam fir----- Basswood----- Red maple----- Sugar maple----- White ash----- White spruce-----	--- --- --- 67 --- ---	--- --- --- 41 --- ---	Eastern white pine, jack pine, red pine, white spruce.
Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock---- Eastern hophornbeam Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
327: Foxpaw-----	Slight	Well suited	Severe: Wetness	High: Wetness	Balsam poplar----- Bigtooth aspen----- Black ash----- Green ash----- Quaking aspen----- Red maple----- Sugar maple-----	--- --- --- --- --- 54 ---	--- --- --- --- --- --- ---	Eastern white pine, larch, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
327: Sarwet-----	Slight	Poorly suited: Wetness	Moderate: Wetness	Moderate: Wetness	American basswood---	66	---	Eastern white pine, red pine.
					Bigtooth aspen-----	---	---	
					Eastern hemlock-----	---	---	
					Quaking aspen-----	75	92	
					Red maple-----	---	---	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	
328B: Annalake-----	Slight	Poorly suited: Wetness	Moderate: Wetness	Low	Balsam fir-----	---	---	Eastern white pine, red pine, white spruce.
					Eastern white pine--	---	---	
					Green ash-----	---	---	
					Paper birch-----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	61	38	
					Sugar maple-----	65	40	
					White spruce-----	---	---	
					Yellow birch-----	---	---	
Karlin-----	Slight	Well suited	Slight	Low	American basswood---	68	---	Eastern white pine, jack pine, red pine, white spruce.
					Eastern hophornbeam	---	---	
					Quaking aspen-----	80	95	
					Red pine-----	80	168	
					Sugar maple-----	70	46	
					White ash-----	---	---	
					Yellow birch-----	---	---	
328C: Annalake-----	Slight	Poorly suited: Wetness	Moderate: Wetness	Low	Balsam fir-----	---	---	Eastern white pine, red pine, white spruce.
					Eastern white pine--	---	---	
					Green ash-----	---	---	
					Paper birch-----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	61	38	
					Sugar maple-----	65	40	
					White spruce-----	---	---	
					Yellow birch-----	---	---	
Karlin-----	Slight	Well suited	Slight	Low	American basswood---	68	---	Eastern white pine, jack pine, red pine, white spruce.
					Eastern hophornbeam	---	---	
					Quaking aspen-----	80	95	
					Red pine-----	80	168	
					Sugar maple-----	70	46	
					White ash-----	---	---	
					Yellow birch-----	---	---	
328D: Karlin-----	Slight	Poorly suited: Slope	Slight	Low	American basswood---	68	---	Eastern white pine, jack pine, red pine, white spruce.
					Quaking aspen-----	80	95	
					Red pine-----	80	168	
					Sugar maple-----	70	46	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
328D: Zandi-----	Slight	Poorly suited: Slope	Slight	Low	American basswood----	---	---	Eastern white pine, red pine.
					Eastern white pine--	---	---	
					Northern red oak----	---	---	
					Red maple-----	---	---	
					Red pine-----	---	---	
					Sugar maple-----	61	43	
					Yellow birch-----	---	---	
329A: Tula-----	Slight	Poorly suited: Rock fragments	Moderate: Wetness Rooting depth	High: Wetness	Balsam fir-----	---	---	Eastern white pine, white spruce.
					Eastern hemlock----	---	---	
					Eastern white pine--	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	65	40	
					Sugar maple-----	---	---	
351B: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood----	66	---	Eastern white pine, red pine, white spruce.
					Eastern hemlock----	---	---	
					Eastern hophornbeam	---	---	
					Northern red oak----	73	64	
					Quaking aspen-----	75	92	
					Red maple-----	---	---	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
					White ash-----	---	---	
					Yellow birch-----	---	---	
351C: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood----	66	---	Eastern white pine, red pine, white spruce.
					Eastern hemlock----	---	---	
					Eastern hophornbeam	---	---	
					Northern red oak----	73	64	
					Quaking aspen-----	75	92	
					Red maple-----	---	---	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
					White ash-----	---	---	
					Yellow birch-----	---	---	
351D: Gogebic-----	Slight	Poorly suited: Slope Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood----	66	---	Eastern white pine, red pine, white spruce.
					Eastern hemlock----	---	---	
					Eastern hophornbeam	---	---	
					Northern red oak----	73	64	
					Quaking aspen-----	75	92	
					Red maple-----	---	---	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
					White ash-----	---	---	
					Yellow birch-----	---	---	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
351E: Schweitzer----	Slight	Unsuited: Slope Rock fragments	Severe: Rooting depth	Low	American basswood----	---	---	Eastern white pine, red pine.
					Balsam fir-----	---	---	
					Eastern hemlock----	---	---	
					Eastern hophornbeam	---	---	
					Eastern white pine--	---	---	
					Northern red oak----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Sugar maple-----	64	40	
351F: Schweitzer----	Slight	Unsuited: Slope Rock fragments	Severe: Rooting depth	Low	American basswood----	---	---	Eastern white pine, red pine.
					Balsam fir-----	---	---	
					Eastern hemlock----	---	---	
					Eastern hophornbeam	---	---	
					Eastern white pine--	---	---	
					Northern red oak----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Sugar maple-----	64	40	
353A: Tula-----	Slight	Poorly suited: Rock fragments	Moderate: Wetness Rooting depth	High: Wetness	Balsam fir-----	---	---	Eastern white pine, white spruce.
					Eastern hemlock----	---	---	
					Eastern white pine--	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	65	40	
					Sugar maple-----	---	---	
354B: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood----	66	---	Eastern white pine, red pine, white spruce.
					Eastern hemlock----	---	---	
					Eastern hophornbeam	---	---	
					Northern red oak----	73	64	
					Quaking aspen-----	75	92	
					Red maple-----	---	---	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
					White ash-----	---	---	
					Yellow birch-----	---	---	
354C: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood----	66	---	Eastern white pine, red pine, white spruce.
					Eastern hemlock----	---	---	
					Eastern hophornbeam	---	---	
					Northern red oak----	73	64	
					Quaking aspen-----	75	92	
					Red maple-----	---	---	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
					White ash-----	---	---	
					Yellow birch-----	---	---	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
354D: Gogebic-----	Slight	Poorly suited: Slope Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Northern red oak----- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
354E: Schweitzer----	Slight	Unsuited: Slope Rock fragments	Severe: Rooting depth	Low	American basswood--- Balsam fir----- Eastern hemlock----- Eastern hophornbeam--- Eastern white pine-- Northern red oak----- Quaking aspen----- Red maple----- Sugar maple-----	--- --- --- --- --- --- --- 64	--- --- --- --- --- --- 40	Eastern white pine, red pine.
354F: Schweitzer----	Slight	Unsuited: Slope Rock fragments	Severe: Rooting depth	Low	American basswood--- Balsam fir----- Eastern hemlock----- Eastern hophornbeam--- Eastern white pine-- Northern red oak----- Quaking aspen----- Red maple----- Sugar maple-----	--- --- --- --- --- --- --- 64	--- --- --- --- --- 40	Eastern white pine, red pine.
363C: Talus.								
Arcadian-----	Slight	Unsuited: Restrictive layer Rock fragments	Severe: Rooting depth	Moderate: Droughty	American elm----- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Ironwood----- White ash----- Yellow birch----- American basswood--- Quaking aspen----- Sugar maple-----	--- --- --- --- --- --- --- 68 80 70	--- --- 95 46	Eastern white pine, white spruce.
363D: Talus.								

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
363D: Arcadian-----	Slight	Unsuited: Restrictive layer Slope Rock fragments	Severe: Rooting depth	Moderate: Droughty	American elm----- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Ironwood----- White ash----- Yellow birch----- American basswood--- Quaking aspen----- Sugar maple-----	--- --- --- --- --- --- --- 68 80 70	--- --- --- --- --- --- --- --- 95 46	Eastern white pine, white spruce.
363E: Talus.								
Arcadian-----	Slight	Unsuited: Slope Restrictive layer Rock fragments	Severe: Rooting depth	Moderate: Droughty	American elm----- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Ironwood----- White ash----- Yellow birch----- American basswood--- Quaking aspen----- Sugar maple-----	--- --- --- --- --- --- --- 68 80 70	--- --- --- --- --- --- --- --- 95 46	Eastern white pine, white spruce.
363F: Talus.								
Arcadian-----	Slight	Unsuited: Slope Restrictive layer Rock fragments	Severe: Rooting depth	Moderate: Droughty	American elm----- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Ironwood----- White ash----- Yellow birch----- American basswood--- Quaking aspen----- Sugar maple-----	--- --- --- --- --- --- --- 68 80 70	--- --- --- --- --- --- --- --- 95 46	Eastern white pine, white spruce.
364F. Talus								
365F. Rock outcrop								
369C: Dishno-----	Slight	Well suited	Moderate: Wetness	Low	American basswood--- Quaking aspen----- Red pine----- Sugar maple-----	68 80 80 70	--- 95 168 46	Eastern white pine, red pine.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
369C: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Northern red oak----- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
Peshekee-----	Slight	Poorly suited: Rock fragments	Severe: Rooting depth	Low	Eastern hemlock----- Eastern white pine-- Northern red oak--- Paper birch----- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- Yellow birch-----	--- 53 55 56 --- --- --- 53 ---	99 42 59 --- --- --- 34 ---	Eastern white pine, red pine.
Rock outcrop.								
369D: Dishno-----	Slight	Poorly suited: Slope	Moderate: Wetness	Low	American basswood--- Northern white cedar--- Quaking aspen----- Red pine----- Sugar maple-----	68 --- 80 80 70	--- --- 95 168 46	Eastern hemlock, sugar maple, basswood, sugar maple, yellow birch, bigtooth aspen, black cherry, quaking aspen, sugar maple.
Gogebic-----	Slight	Poorly suited: Slope Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Northern red oak----- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
Peshekee-----	Slight	Poorly suited: Slope Rock fragments	Severe: Rooting depth	Low	Eastern hemlock----- Eastern white pine-- Northern red oak--- Paper birch----- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- Yellow birch-----	--- 53 55 56 --- --- --- 53 ---	--- 99 42 59 --- --- --- 34 ---	Eastern white pine, red pine.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
369D: Rock outcrop.								
369E: Michigamme----	Slight	Unsuited: Slope Rock fragments	Slight	Low	American basswood---	68	---	Eastern white pine, red pine.
					Bigtooth aspen-----	---	---	
					Eastern hemlock-----	---	---	
					Eastern white pine--	---	---	
					Ironwood-----	---	---	
					Northern red oak----	---	---	
					Quaking aspen-----	80	95	
					Sugar maple-----	70	46	
					Yellow birch-----	60	43	
Schweitzer----	Slight	Unsuited: Slope Rock fragments	Severe: Rooting depth	Low	American basswood---	---	---	Eastern white pine, red pine.
					Balsam fir-----	---	---	
					Eastern hemlock-----	---	---	
					Eastern hophornbeam	---	---	
					Eastern white pine--	---	---	
					Northern red oak----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Sugar maple-----	64	40	
Peshekee-----	Slight	Unsuited: Slope Rock fragments	Severe: Rooting depth	Low	Eastern hemlock-----	---	---	Eastern white pine, red pine.
					Eastern white pine--	53	99	
					Northern red oak----	55	42	
					Paper birch-----	56	59	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Red pine-----	---	---	
					Sugar maple-----	53	34	
					Yellow birch-----	---	---	
Rock outcrop.								
369F: Michigamme----	Slight	Unsuited: Slope Rock fragments	Slight	Low	American basswood---	68	---	Eastern white pine, red pine.
					Bigtooth aspen-----	---	---	
					Eastern hemlock-----	---	---	
					Eastern white pine--	---	---	
					Ironwood-----	---	---	
					Northern red oak----	---	---	
					Quaking aspen-----	80	95	
					Sugar maple-----	70	46	
					Yellow birch-----	60	43	
Schweitzer----	Slight	Unsuited: Slope Rock fragments	Severe: Rooting depth	Low	American basswood---	---	---	Eastern white pine, red pine.
					Balsam fir-----	---	---	
					Eastern hemlock-----	---	---	
					Eastern hophornbeam	---	---	
					Eastern white pine--	---	---	
					Northern red oak----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Sugar maple-----	64	40	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
369F: Peshekee-----	Slight	Unsuited: Slope Rock fragments	Severe: Rooting depth	Low	Eastern hemlock----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- Yellow birch-----	--- 53 55 56 --- --- --- 53 ---	--- 99 42 59 --- --- --- 34 ---	Eastern white pine, red pine.
Rock outcrop.								
370E: Peshekee-----	Slight	Unsuited: Slope Rock fragments	Severe: Rooting depth	Low	Eastern hemlock----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- Yellow birch-----	--- 53 55 56 --- --- --- 53 ---	--- 99 42 59 --- --- --- 34 ---	Eastern white pine, red pine.
Rock outcrop.								
370F: Peshekee-----	Slight	Unsuited: Slope Rock fragments	Severe: Rooting depth	Low	Eastern hemlock----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- Yellow birch-----	--- 53 55 56 --- --- --- 53 ---	--- 99 42 59 --- --- --- 34 ---	Eastern white pine, red pine.
Rock outcrop.								
375. Dumps and Pits, mine								
380: Beseman-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam poplar----- Black spruce----- Eastern hemlock----- Northern white cedar Paper birch----- Red maple----- Yellow birch-----	--- --- --- --- --- --- ---	--- --- --- --- --- --- ---	Eastern hemlock, northern whitecedar.
Greenwood-----	Slight	Unsuited: Wetness	Severe: Wetness	High: Wetness	Black spruce----- Red maple----- Tamarack-----	15 --- ---	29 --- ---	Black spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
382: Cathro-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam fir----- Black ash----- Northern white cedar Paper birch----- Red maple----- Tamarack----- White spruce-----	40 15 15 --- 40 35 ---	72 29 29 --- 29 29 ---	Northern whitecedar, white spruce.
Arnheim-----	Slight	Well suited	Severe: Wetness	High: Wetness	Balsam fir----- Black ash----- Green ash----- Northern white cedar Paper birch----- Quaking aspen----- Red maple----- Tamarack----- White spruce----- Yellow birch-----	--- --- --- --- --- --- --- --- 38 ---	--- --- --- --- --- --- --- --- 72 ---	Northern whitecedar, white spruce.
388: Gay-----	Slight	Well suited	Severe: Wetness	High: Wetness	American basswood--- Balsam fir----- Black spruce----- Green ash----- Red maple----- Tamarack----- White spruce-----	51 46 51 52 51 60 60	--- --- --- --- --- --- ---	Eastern white pine, larch, white spruce.
Tula-----	Slight	Poorly suited: Rock fragments	Moderate: Wetness Rooting depth	High: Wetness	Balsam fir----- Eastern hemlock----- Eastern white pine-- Quaking aspen----- Red maple----- Sugar maple-----	--- --- --- --- 65 ---	--- --- --- --- 40 ---	Eastern white pine, white spruce.
398B: Tula-----	Slight	Poorly suited: Rock fragments	Moderate: Wetness Rooting depth Wetness	High: Wetness	Balsam fir----- Eastern hemlock----- Eastern white pine-- Quaking aspen----- Red maple----- Sugar maple-----	--- --- --- --- 65 ---	--- --- --- --- 40 ---	Eastern white pine, white spruce.
Gay-----	Slight	Well suited	Severe: Wetness	High: Wetness	American basswood--- Balsam fir----- Black spruce----- Green ash----- Red maple----- Tamarack----- White spruce-----	51 46 51 52 51 60 60	--- --- --- --- --- --- ---	Eastern white pine, larch, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
398B: Wakefield-----	Slight	Poorly suited: Wetness	Moderate: Wetness	High: Wetness	American basswood--- Balsam fir----- Eastern hemlock----- Eastern white pine-- Northern red oak---- Quaking aspen----- Red pine----- Sugar maple----- Yellow birch-----	66 --- --- --- 73 75 80 63 ---	--- --- --- 64 92 168 42 ---	Eastern white pine, red pine, white spruce.
418: Loxley-----	Slight	Unsuited: Wetness	Severe: Wetness	High: Wetness	Balsam fir----- Black spruce----- Tamarack-----	--- 15 ---	--- 29 ---	Black spruce.
Beseman-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam poplar----- Black spruce----- Eastern hemlock----- Northern white cedar Paper birch----- Red maple----- Yellow birch-----	--- --- --- --- --- --- ---	--- --- --- --- --- --- ---	Eastern hemlock, northern whitecedar.
419: Pleine-----	Slight	Poorly suited: Rock fragments	Severe: Wetness	High: Wetness	Balsam fir----- Balsam poplar----- Black ash----- Northern white cedar Paper birch----- Red maple-----	45 --- --- --- --- ---	83 --- --- --- --- ---	Eastern arborvitae, tamarack.
Cathro-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam fir----- Black ash----- Northern white cedar Paper birch----- Red maple----- Tamarack----- White spruce-----	40 15 15 --- 40 35 ---	72 29 29 --- 29 29 ---	Northern whitecedar, white spruce.
Gay-----	Slight	Well suited	Severe: Wetness	High: Wetness	American basswood--- Balsam fir----- Black spruce----- Green ash----- Red maple----- Tamarack----- White spruce-----	51 46 51 52 51 60 60	--- --- --- --- --- --- ---	Eastern white pine, larch, white spruce.
424: Gay-----	Slight	Well suited	Severe: Wetness	High: Wetness	American basswood--- Balsam fir----- Black spruce----- Green ash----- Red maple----- Tamarack----- White spruce-----	51 46 51 52 51 60 60	--- --- --- --- --- --- ---	Eastern white pine, larch, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
425: Foxpaw-----	Slight	Well suited	Severe: Wetness	High: Wetness	Balsam poplar----- Bigtooth aspen----- Black ash----- Green ash----- Quaking aspen----- Red maple----- Sugar maple-----	--- --- --- --- --- 54 ---	--- --- --- --- --- --- ---	Eastern white pine, larch, white spruce.
Gay-----	Slight	Well suited	Severe: Wetness	High: Wetness	American basswood--- Balsam fir----- Black spruce----- Green ash----- Red maple----- Tamarack----- White spruce-----	51 46 51 52 51 60 60	--- --- --- --- --- --- ---	Eastern white pine, larch, white spruce.
428C: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam Northern red oak--- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
Michigamme----	Slight	Poorly suited: Rock fragments	Slight	Low	American elm----- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Ironwood----- White ash----- Yellow birch----- American basswood--- Quaking aspen----- Sugar maple-----	--- --- --- --- --- --- 60 68 80 70	--- --- --- --- --- 43 --- 95 46	Eastern white pine, red pine.
428D: Gogebic-----	Slight	Poorly suited: Slope Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam Northern red oak--- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
428D: Michigamme----	Slight	Poorly suited: Slope Rock fragments	Slight	Low	American elm----- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Ironwood----- White ash----- Yellow birch----- American basswood--- Quaking aspen----- Sugar maple-----	--- --- --- --- --- 60 68 80 70	--- --- --- --- 43 95 46	Eastern white pine, red pine.
429B: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- 64 92 --- 168 42 ---	Eastern white pine, red pine, white spruce.
Peshekee-----	Slight	Poorly suited: Rock fragments	Severe: Rooting depth	Low	Eastern hemlock----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- Yellow birch-----	--- 53 55 56 --- --- --- 53 ---	--- 99 42 59 --- --- 34 ---	Eastern white pine, red pine.
429C: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- 64 92 --- 168 42 ---	Eastern white pine, red pine, white spruce.
Peshekee-----	Slight	Poorly suited: Rock fragments	Severe: Rooting depth	Low	Eastern hemlock----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- Yellow birch-----	--- 53 55 56 --- --- --- 53 ---	--- 99 42 59 --- --- 34 ---	Eastern white pine, red pine.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
429D: Gogebic-----	Slight	Poorly suited: Slope Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
Peshekee-----	Slight	Poorly suited: Slope Rock fragments	Severe: Rooting depth	Low	Eastern hemlock----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- Yellow birch-----	--- 53 55 56 --- --- --- 53 ---	99 42 59 --- --- --- 34 ---	Eastern white pine, red pine.
429E: Schweitzer----	Slight	Unsuited: Slope Rock fragments	Severe: Rooting depth	Low	American basswood--- Balsam fir----- Eastern hemlock----- Eastern hophornbeam--- Eastern white pine-- Northern red oak---- Quaking aspen----- Red maple----- Sugar maple-----	--- --- --- --- --- --- --- --- 64	--- --- --- --- --- --- --- --- 40	Eastern white pine, red pine.
Peshekee-----	Slight	Unsuited: Slope Rock fragments	Severe: Rooting depth	Low	Eastern hemlock----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- Yellow birch-----	--- 53 55 56 --- --- --- 53 ---	99 42 59 --- --- --- 34 ---	Eastern white pine, red pine.
430B: Stutts-----	Slight	Well suited	Slight	Low	Eastern hemlock----- Eastern white pine-- Jack pine----- Northern red oak---- Paper birch----- Quaking aspen----- Red pine----- Sugar maple----- Yellow birch-----	--- --- 78 71 --- 77 80 --- ---	--- --- 80 68 --- 86 168 --- ---	Eastern white pine, jack pine, red pine.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
430C: Stutts-----	Slight	Well suited	Slight	Low	Eastern hemlock----- Eastern white pine-- Jack pine----- Northern red oak---- Paper birch----- Quaking aspen----- Red pine----- Sugar maple----- Yellow birch-----	--- --- 78 71 --- 77 80 --- ---	--- --- 80 68 --- 86 168 --- ---	Eastern white pine, jack pine, red pine.
430D: Stutts-----	Slight	Poorly suited: Slope	Slight	Low	Eastern hemlock----- Eastern white pine-- Jack pine----- Northern red oak---- Paper birch----- Quaking aspen----- Red pine----- Sugar maple----- Yellow birch-----	--- --- 78 71 --- 77 80 --- ---	--- --- 80 68 --- 86 168 --- ---	Eastern white pine, jack pine, red pine.
430E: Stutts-----	Slight	Unsuited: Slope	Slight	Low	Eastern hemlock----- Eastern white pine-- Jack pine----- Northern red oak---- Paper birch----- Quaking aspen----- Red pine----- Sugar maple----- Yellow birch-----	--- --- 78 71 --- 77 80 --- ---	--- --- 80 68 --- 86 168 --- ---	Eastern white pine, jack pine, red pine.
432C: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
Michigamme----	Slight	Poorly suited: Rock fragments	Slight	Low	American basswood--- Bigtooth aspen----- Eastern hemlock----- Eastern white pine-- Ironwood----- Northern red oak---- Quaking aspen----- Sugar maple----- Yellow birch-----	68 --- --- --- --- --- 80 70 60	--- --- --- --- --- --- 95 46 43	Eastern white pine, red pine.
Rock outcrop.								

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
432D: Gogebic-----	Slight	Poorly suited: Wetness Slope	Severe: Wetness Rooting depth	High: Wetness	American basswood---	66	---	Eastern white pine, red pine, white spruce.
					Eastern hemlock-----	---	---	
					Eastern hophornbeam---	---	---	
					Northern red oak----	73	64	
					Quaking aspen-----	75	92	
					Red maple-----	---	---	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
					White ash-----	---	---	
					Yellow birch-----	---	---	
Michigamme----	Slight	Poorly suited: Slope Rock fragments	Slight	Low	American basswood---	68	---	Eastern white pine, red pine.
					Bigtooth aspen-----	---	---	
					Eastern hemlock-----	---	---	
					Eastern white pine--	---	---	
					Ironwood-----	---	---	
					Northern red oak----	---	---	
					Quaking aspen-----	80	95	
					Sugar maple-----	70	46	
					Yellow birch-----	60	43	
Rock outcrop.								
432E: Schweitzer----	Slight	Unsuited: Slope Rock fragments	Severe: Rooting depth	Low	American basswood---	---	---	Eastern white pine, red pine.
					Balsam fir-----	---	---	
					Eastern hemlock-----	---	---	
					Eastern hophornbeam---	---	---	
					Eastern white pine--	---	---	
					Northern red oak----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Sugar maple-----	64	40	
Michigamme----	Slight	Unsuited: Slope Rock fragments	Slight	Low	American elm-----	---	---	Eastern white pine, red pine.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Ironwood-----	---	---	
					White ash-----	---	---	
					Yellow birch-----	60	43	
					American basswood---	68	---	
					Quaking aspen-----	80	95	
					Sugar maple-----	70	46	
Rock outcrop.								
432F: Schweitzer----	Slight	Unsuited: Slope Rock fragments	Severe: Rooting depth	Low	American basswood---	---	---	Eastern white pine, red pine.
					Balsam fir-----	---	---	
					Eastern hemlock-----	---	---	
					Eastern hophornbeam---	---	---	
					Eastern white pine--	---	---	
					Northern red oak----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Sugar maple-----	64	40	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
432F: Michigamme----	Slight	Unsuited: Slope Rock fragments	Slight	Low	American elm----- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Ironwood----- White ash----- Yellow birch----- American basswood--- Quaking aspen----- Sugar maple-----	--- --- --- --- --- --- 60 68 80 70	--- --- --- --- --- --- 43 --- 95 46	Eastern white pine, red pine.
Rock outcrop.								
433B: McMillan-----	Slight	Well suited	Slight	Low	American basswood--- Bigtooth aspen----- Eastern hemlock----- Eastern hophornbeam Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	66 --- --- --- 75 --- 63 ---	--- --- --- 92 --- --- 42 ---	Eastern white pine, jack pine, red pine.
433C: McMillan-----	Slight	Well suited	Slight	Low	American basswood--- Bigtooth aspen----- Eastern hemlock----- Eastern hophornbeam Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	66 --- --- --- 75 --- 63 ---	--- --- --- 92 --- --- 42 ---	Eastern white pine, jack pine, red pine.
433D: McMillan-----	Slight	Poorly suited: Slope	Slight	Low	American basswood--- Bigtooth aspen----- Eastern hemlock----- Eastern hophornbeam Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	66 --- --- --- 75 --- 63 ---	--- --- --- 92 --- --- 42 ---	Eastern white pine, jack pine, red pine.
435C: Kalkaska-----	Slight	Well suited	Slight	Low	Bigtooth aspen----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine----- Sugar maple-----	80 --- --- --- --- 63 --- 64	100 --- --- --- --- 43 --- 43	Eastern white pine, red pine.
Waiska-----	Slight	Well suited	Slight	Moderate: Droughty	American basswood--- Quaking aspen----- Red pine----- Sugar maple-----	68 80 80 70	--- 95 168 46	Eastern white pine, red pine.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
435D: Kalkaska-----	Slight	Poorly suited: Slope	Slight	Low	Bigtooth aspen----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine----- Sugar maple-----	80 --- --- --- --- 63 --- 64	100 --- --- --- --- 43 --- 43	Eastern white pine, red pine.
Waiska-----	Slight	Poorly suited: Slope	Slight	Moderate: Droughty	American basswood--- Quaking aspen----- Red pine----- Sugar maple-----	68 80 80 70	--- 95 168 46	Eastern white pine, red pine.
435E: Kalkaska-----	Slight	Unsuited: Slope	Slight	Low	Bigtooth aspen----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine----- Sugar maple-----	80 --- --- --- --- 63 --- 64	100 --- --- --- --- 43 --- 43	Eastern white pine, red pine.
Waiska-----	Slight	Unsuited: Slope	Slight	Moderate: Droughty	American basswood--- Quaking aspen----- Red pine----- Sugar maple-----	68 80 80 70	--- 95 168 46	Eastern white pine, red pine.
437B: Manitowish----	Slight	Well suited	Moderate: Wetness	Low	Eastern hemlock----- Eastern white pine-- Quaking aspen----- Red maple----- Red pine----- Sugar maple-----	--- --- --- --- 59 60	--- --- --- --- 100 43	Eastern white pine, jack pine, red pine.
Channing-----	Slight	Well suited	Moderate: Wetness	High: Wetness	American basswood--- Northern red oak---- Quaking aspen----- Red pine----- Sugar maple-----	66 73 75 80 63	--- 64 92 168 42	Eastern white pine, northern red oak, red pine, white spruce.
448F: Rockland-----	Slight	Unsuited: Slope	Slight	Low	Balsam fir----- Eastern hemlock----- Eastern white pine-- Green ash----- Quaking aspen----- Sugar maple----- White spruce-----	--- --- --- --- --- 61 ---	--- --- --- --- --- 38 ---	Eastern white pine, red pine, white spruce.
Rock outcrop.								

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
449C: Flintsteel----	Slight	Well suited	Moderate: Wetness	Moderate: Wetness	American basswood---	65	57	Eastern white pine, green ash, white spruce.
					Balsam fir-----	---	---	
					Basswood-----	---	---	
					Eastern hemlock----	---	---	
					Green ash-----	---	---	
					Ironwood-----	---	---	
					Northern white cedar	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Sugar maple-----	59	37	
					White ash-----	67	60	
					Yellow birch-----	---	---	
Minocqua-----	Slight	Well suited	Severe: Wetness	High: Wetness	Balsam fir-----	---	---	Black ash, black spruce, northern whitecedar, white spruce.
					Balsam poplar-----	---	---	
					Bigtooth aspen-----	---	---	
					Black ash-----	---	---	
					Black spruce-----	---	---	
					Eastern hemlock----	---	---	
					Northern white cedar	---	---	
					Paper birch-----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
					White spruce-----	---	---	
					Yellow birch-----	---	---	
452F: Rockland-----	Slight	Unsuited: Slope	Slight	Low	Balsam fir-----	---	---	Eastern white pine, red pine, white spruce.
					Eastern hemlock----	---	---	
					Eastern white pine--	---	---	
					Green ash-----	---	---	
					Quaking aspen-----	---	---	
					Sugar maple-----	61	38	
					White spruce-----	---	---	
460B: Belding-----	Slight	Well suited	Moderate: Wetness	High: Wetness	Balsam fir-----	55	114	Eastern white pine, white spruce.
					Northern red oak----	65	57	
					Paper birch-----	58	57	
					Quaking aspen-----	65	72	
					Red pine-----	---	---	
					Sugar maple-----	---	---	
					Yellow birch-----	---	---	
Manido-----	Slight	Well suited	Moderate: Wetness	Low	Balsam fir-----	---	---	Eastern white pine, red pine, white spruce.
					Eastern hemlock----	---	---	
					Red maple-----	51	33	
					Sugar maple-----	---	---	
					White spruce-----	---	---	
					Yellow birch-----	---	---	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
461B: Loggerhead----	Slight	Poorly suited: Wetness	Moderate: Wetness	Moderate: Wetness	American basswood---	---	---	Eastern white pine, red pine, white spruce.
					Balsam fir-----	---	---	
					Eastern hemlock----	---	---	
					Green ash-----	---	---	
					Quaking aspen-----	80	94	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
					Yellow birch-----	---	---	
462C: Nonesuch-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	Moderate: Wetness	Bigtooth aspen-----	---	---	Eastern white pine, white spruce.
					Black cherry-----	---	---	
					Eastern white pine--	---	---	
					Green ash-----	---	---	
					Quaking aspen-----	74	86	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
Rock outcrop.								
509: Cathro-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam fir-----	40	72	Northern whitecedar, white spruce.
					Black ash-----	15	29	
					Northern white cedar	15	29	
					Paper birch-----	---	---	
					Red maple-----	40	29	
					Tamarack-----	35	29	
					White spruce-----	---	---	
Minocqua-----	Slight	Well suited	Severe: Wetness	High: Wetness	Balsam fir-----	---	---	Black ash, black spruce, northern whitecedar, white spruce.
					Balsam poplar-----	---	---	
					Bigtooth aspen-----	---	---	
					Black ash-----	---	---	
					Black spruce-----	---	---	
					Eastern hemlock-----	---	---	
					Northern white cedar	---	---	
					Paper birch-----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
					White spruce-----	---	---	
					Yellow birch-----	---	---	
511A: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood---	66	---	Eastern white pine, red pine, white spruce.
					Eastern hemlock-----	---	---	
					Eastern hophornbeam	---	---	
					Northern red oak----	73	64	
					Quaking aspen-----	75	92	
					Red maple-----	---	---	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
					White ash-----	---	---	
					Yellow birch-----	---	---	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
511A: Tula-----	Slight	Poorly suited: Rock fragments	Moderate: Wetness Rooting depth	High: Wetness	Balsam fir----- Eastern hemlock----- Eastern white pine-- Quaking aspen----- Red maple----- Sugar maple-----	--- --- --- --- 65 ---	--- --- --- --- 40 ---	Eastern white pine, white spruce.
Chabeneau----	Slight	Well suited	Moderate: Wetness	Moderate: Wetness	American basswood--- Quaking aspen----- Red pine----- Sugar maple-----	68 80 80 70	--- 95 168 46	Eastern white pine, northern red oak, red pine, white spruce.
519B: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
Karlin-----	Slight	Well suited	Slight	Low	American basswood--- Eastern hophornbeam Quaking aspen----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	68 --- 80 80 70 --- ---	--- --- 95 168 46 --- ---	Eastern white pine, jack pine, red pine, white spruce.
519C: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
Karlin-----	Slight	Well suited	Slight	Low	American basswood--- Eastern hophornbeam Quaking aspen----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	68 --- 80 80 70 --- ---	--- --- 95 168 46 --- ---	Eastern white pine, jack pine, red pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
519D: Gogebic-----	Slight	Poorly suited: Slope Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
Karlin-----	Slight	Poorly suited: Slope	Slight	Low	American basswood--- Quaking aspen----- Red pine----- Sugar maple-----	68 80 80 70	--- 95 168 46	Eastern white pine, jack pine, red pine, white spruce.
522. Pits, sand and gravel								
523D: Gogebic, sandy substratum---	Slight	Poorly suited: Wetness Slope	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
Karlin-----	Slight	Poorly suited: Slope	Slight	Low	American basswood--- Quaking aspen----- Red pine----- Sugar maple-----	68 80 80 70	--- 95 168 46	Eastern white pine, jack pine, red pine, white spruce.
524C: Waiska-----	Slight	Well suited	Slight	Moderate: Droughty	American basswood--- Northern red oak---- Quaking aspen----- Red pine----- Sugar maple-----	66 73 75 80 63	--- 64 92 168 42	Eastern white pine, red pine.
Amasa-----	Slight	Poorly suited: Rock fragments	Slight	Low	American basswood--- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	66 --- --- --- 75 --- 63 ---	--- --- --- 92 --- 42 ---	Eastern white pine, red pine.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
524D: Waiska-----	Slight	Poorly suited: Slope	Slight	Moderate: Droughty	American basswood----	66	---	Eastern white pine, red pine.
					Northern red oak----	73	64	
					Quaking aspen-----	75	92	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
Amasa-----	Slight	Poorly suited: Slope Rock fragments	Slight	Low	American basswood----	66	---	Eastern white pine, red pine.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Quaking aspen-----	75	92	
					Red maple-----	---	---	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	
524E: Waiska-----	Slight	Unsuited: Slope	Slight	Moderate: Droughty	American basswood----	66	---	Eastern white pine, red pine.
					Northern red oak----	73	64	
					Quaking aspen-----	75	92	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
Amasa-----	Slight	Unsuited: Slope Rock fragments	Slight	Low	American basswood----	66	---	Eastern white pine, red pine.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Quaking aspen-----	75	92	
					Red maple-----	---	---	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	
527B: Wakefield-----	Slight	Poorly suited: Wetness	Moderate: Wetness	High: Wetness	American basswood----	66	---	Eastern white pine, red pine, white spruce.
					Balsam fir-----	---	---	
					Eastern hemlock-----	---	---	
					Eastern white pine--	---	---	
					Northern red oak----	73	64	
					Quaking aspen-----	75	92	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	
527C: Wakefield-----	Moderate: Slope	Poorly suited: Wetness	Moderate: Wetness	High: Wetness	American basswood----	66	---	Eastern white pine, red pine, white spruce.
					Northern red oak----	73	64	
					Quaking aspen-----	75	92	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
527D: Wakefield-----	Severe: Slope	Poorly suited: Slope Wetness	Moderate: Wetness	High: Wetness	American basswood----	66	---	Eastern white pine, red pine, white spruce.
					Northern red oak----	73	64	
					Quaking aspen-----	75	92	
					Red pine-----	80	168	
					Sugar maple-----	63	42	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
528B: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood----	66	---	Eastern white pine, red pine, white spruce.
					Eastern hemlock-----	---	---	
					Eastern hophornbeam----	---	---	
					Northern red oak-----	73	64	
					Quaking aspen-----	75	92	
					Red maple-----	---	---	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
					White ash-----	---	---	
					Yellow birch-----	---	---	
Annalake-----	Slight	Poorly suited: Wetness	Moderate: Wetness	Low	American elm-----	---	---	Eastern white pine, red pine, white spruce.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Ironwood-----	---	---	
					White ash-----	---	---	
					Yellow birch-----	---	---	
					American basswood----	68	---	
					Quaking aspen-----	80	95	
					Sugar maple-----	70	46	
528C: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood----	66	---	Eastern white pine, red pine, white spruce.
					Eastern hemlock-----	---	---	
					Eastern hophornbeam----	---	---	
					Northern red oak-----	73	64	
					Quaking aspen-----	75	92	
					Red maple-----	---	---	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
					White ash-----	---	---	
					Yellow birch-----	---	---	
Annalake-----	Moderate: Slope	Poorly suited: Wetness	Moderate: Wetness	Low	American elm-----	---	---	Eastern white pine, red pine, white spruce.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Ironwood-----	---	---	
					White ash-----	---	---	
					Yellow birch-----	---	---	
					American basswood----	68	---	
					Quaking aspen-----	80	95	
					Sugar maple-----	70	46	
528D: Gogebic-----	Slight	Poorly suited: Slope Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood----	66	---	Eastern white pine, red pine, white spruce.
					Eastern hemlock-----	---	---	
					Eastern hophornbeam----	---	---	
					Green ash-----	---	---	
					Northern red oak-----	73	64	
					Quaking aspen-----	75	92	
					Red maple-----	---	---	
					Red pine-----	80	168	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
528D: Annalake-----	Severe: Slope	Poorly suited: Slope Wetness	Moderate: Wetness	Low	American elm----- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Ironwood----- White ash----- Yellow birch----- American basswood--- Quaking aspen----- Sugar maple-----	--- --- --- --- --- --- --- 68 80 70	--- --- --- --- --- --- --- --- 95 46	Eastern white pine, red pine, white spruce.
551B: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam Northern red oak--- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- 64 92 --- --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
Dishno-----	Slight	Well suited	Moderate: Wetness	Low	American basswood--- Northern red oak--- Quaking aspen----- Red pine----- Sugar maple-----	66 73 75 80 63	--- 64 92 168 42	Eastern white pine, red pine.
566. Beach, rubbly								
576B: Flintsteel----	Slight	Well suited	Moderate: Wetness	Moderate: Wetness	American basswood--- Balsam fir----- Basswood----- Eastern hemlock----- Green ash----- Ironwood----- Northern white cedar Quaking aspen----- Red maple----- Sugar maple----- White ash----- Yellow birch-----	65 --- --- --- --- --- --- --- --- 59 67 ---	57 --- --- --- --- --- --- --- --- 37 60 ---	Eastern white pine, red pine, white spruce.
Loggerhead----	Slight	Poorly suited: Wetness	Moderate: Wetness	Low	American basswood--- Balsam fir----- Eastern hemlock----- Green ash----- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	--- --- --- --- 80 --- --- ---	--- --- --- --- 94 --- --- ---	Eastern white pine, red pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
576C: Flintsteel----	Slight	Well suited	Moderate: Wetness	Moderate: Wetness	American basswood---	65	---	Eastern white pine, red pine, white spruce.
					Balsam fir-----	---	---	
					Basswood-----	---	---	
					Eastern hemlock----	---	---	
					Green ash-----	---	---	
					Ironwood-----	---	---	
					Northern white cedar	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Sugar maple-----	59	---	
					White ash-----	67	---	Eastern white pine, red pine, white spruce.
					Yellow birch-----	---	---	
Loggerhead----	Slight	Poorly suited: Wetness	Moderate: Wetness	Low	American basswood---	---	---	
					Balsam fir-----	---	---	
					Eastern hemlock----	---	---	
					Green ash-----	---	---	
					Quaking aspen-----	80	94	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
					Yellow birch-----	---	---	Eastern white pine, red pine, white spruce.
576D: Flintsteel----	Slight	Poorly suited: Slope	Moderate: Wetness	Moderate: Wetness	American basswood---	65	---	
					Balsam fir-----	---	---	
					Basswood-----	---	---	
					Eastern hemlock----	---	---	
					Green ash-----	---	---	
					Ironwood-----	---	---	
					Northern white cedar	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Sugar maple-----	59	---	
					White ash-----	67	---	Eastern white pine, red pine, white spruce.
					Yellow birch-----	---	---	
Loggerhead----	Slight	Poorly suited: Slope Wetness	Moderate: Wetness	Low	American basswood---	---	---	
					Balsam fir-----	---	---	
					Eastern hemlock----	---	---	
					Green ash-----	---	---	
					Quaking aspen-----	80	94	
					Red maple-----	---	---	
					Sugar maple-----	---	---	Eastern white pine, red pine, white spruce.
					Yellow birch-----	---	---	
577B: Loggerhead----	Slight	Poorly suited: Wetness	Moderate: Wetness	Low	American basswood---	---	---	
					Balsam fir-----	---	---	
					Eastern hemlock----	---	---	
					Green ash-----	---	---	
					Quaking aspen-----	80	94	
					Red maple-----	---	---	Eastern white pine, red pine, white spruce.
					Sugar maple-----	---	---	
					Yellow birch-----	---	---	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
577B: Chabeneau-----	Slight	Well suited	Moderate: Wetness	Moderate: Wetness	American basswood---	68	---	Eastern white pine, northern red oak, red pine, white spruce.
					Quaking aspen-----	80	95	
					Red pine-----	80	168	
					Sugar maple-----	70	46	
Arcadian-----	Slight	Unsuited: Restrictive layer Rock fragments	Severe: Rooting depth	Moderate: Droughty	American elm-----	---	---	Eastern white pine, white spruce.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Ironwood-----	---	---	
					White ash-----	---	---	
					Yellow birch-----	---	---	
					American basswood---	68	---	
					Quaking aspen-----	80	95	Eastern white pine, red pine, white spruce.
					Sugar maple-----	70	46	
577C: Loggerhead----	Slight	Poorly suited: Wetness	Moderate: Wetness	Low	American basswood---	---	---	
					Balsam fir-----	---	---	
					Eastern hemlock-----	---	---	Eastern white pine, red pine, white spruce.
					Green ash-----	---	---	
					Quaking aspen-----	80	94	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
					Yellow birch-----	---	---	Eastern white pine, red pine, white spruce.
Chabeneau-----	Slight	Well suited	Moderate: Wetness	Moderate: Wetness	American basswood---	68	---	
					Quaking aspen-----	80	95	
					Red pine-----	80	168	
					Sugar maple-----	70	46	
Arcadian-----	Slight	Unsuited: Restrictive layer Rock fragments	Severe: Rooting depth	Moderate: Droughty	American elm-----	---	---	Eastern white pine, white spruce.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Ironwood-----	---	---	
					White ash-----	---	---	
					Yellow birch-----	---	---	
					American basswood---	68	---	
					Quaking aspen-----	80	95	Eastern white pine, red pine, white spruce.
					Sugar maple-----	70	46	
577D: Loggerhead----	Slight	Poorly suited: Slope Wetness	Moderate: Wetness	Low	American basswood---	---	---	
					Balsam fir-----	---	---	
					Eastern hemlock-----	---	---	Eastern white pine, red pine, white spruce.
					Green ash-----	---	---	
					Quaking aspen-----	80	94	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
					Yellow birch-----	---	---	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
577D: Chabeneau-----	Moderate: Slope	Poorly suited: Slope	Moderate: Wetness	Moderate: Wetness	American basswood--- Quaking aspen----- Red pine----- Sugar maple-----	68 80 80 70	--- 95 168 46	Eastern white pine, northern red oak, red pine, white spruce.
Arcadian-----	Slight	Unsuited: Restrictive layer Slope Rock fragments	Severe: Rooting depth	Moderate: Droughty	American elm----- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Ironwood----- White ash----- Yellow birch----- American basswood--- Quaking aspen----- Sugar maple-----	--- --- --- --- --- --- --- 68 80 70	--- --- --- --- --- --- --- --- 95 46	Eastern white pine, white spruce.
578D: Arcadian-----	Slight	Unsuited: Restrictive layer Slope Rock fragments	Severe: Rooting depth	Moderate: Droughty	American elm----- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Ironwood----- White ash----- Yellow birch----- American basswood--- Quaking aspen----- Sugar maple-----	--- --- --- --- --- --- --- 68 80 70	--- --- --- --- --- --- --- --- 95 46	Eastern white pine, white spruce.
Keweenaw-----	Slight	Poorly suited: Slope	Slight	Moderate: Droughty	Balsam fir----- Black cherry----- Eastern hemlock----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	--- --- --- --- --- --- --- --- 61 ---	--- --- --- --- --- --- --- --- 43 ---	Eastern white pine, jack pine, red pine, white spruce.
625B: Fence-----	Slight	Well suited	Moderate: Wetness	Low	American basswood--- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Quaking aspen----- Red maple----- Sugar maple----- Yellow birch-----	--- --- --- --- --- --- 65 ---	--- --- --- --- --- --- 40 ---	Eastern white pine, red pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
625C: Fence-----	Moderate: Slope	Well suited	Moderate: Wetness	Low	American basswood----	---	---	Eastern white pine, red pine, white spruce.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Sugar maple-----	65	40	
					Yellow birch-----	---	---	
626D: Sporley-----	Severe: Slope	Poorly suited: Slope	Slight	Low	Bigtooth aspen-----	---	---	Eastern white pine, red pine, white spruce.
					Northern red oak----	73	64	
					Red maple-----	---	---	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	
626E: Sporley-----	Very severe Slope	Unsuited: Slope	Slight	Low	Bigtooth aspen-----	---	---	Eastern white pine, red pine, white spruce.
					Northern red oak----	73	64	
					Red maple-----	---	---	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	
648B: Annalake-----	Slight	Poorly suited: Wetness	Moderate: Wetness	Low	American elm-----	---	---	Eastern white pine, red pine, white spruce.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Ironwood-----	---	---	
					White ash-----	---	---	
					Yellow birch-----	---	---	
					American basswood----	68	---	
					Quaking aspen-----	80	95	
					Sugar maple-----	70	46	
648C: Annalake-----	Moderate: Slope	Poorly suited: Wetness	Moderate: Wetness	Low	American elm-----	---	---	Eastern white pine, red pine, white spruce.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Ironwood-----	---	---	
					White ash-----	---	---	
					Yellow birch-----	---	---	
					American basswood----	68	---	
					Quaking aspen-----	80	95	
					Sugar maple-----	70	46	
650: Leafriver-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness Droughty	American elm-----	---	---	Balsam fir, black spruce, northern whitecedar, tamarack.
					Balsam poplar-----	---	---	
					Bigtooth aspen-----	---	---	
					Black ash-----	---	---	
					Quaking aspen-----	---	---	
					Sugar maple-----	---	---	
					White ash-----	---	---	
					Red maple-----	54	---	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
652B: Manido-----	Slight	Well suited	Moderate: Wetness	Low	Balsam fir----- Eastern hemlock----- Red maple----- Sugar maple----- White spruce----- Yellow birch-----	--- --- 51 --- --- ---	--- --- 33 --- --- ---	Eastern white pine, red pine, white spruce.
Annalake-----	Slight	Poorly suited: Wetness	Moderate: Wetness	Low	American basswood--- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Eastern hophornbeam Quaking aspen----- Red maple----- Sugar maple----- White ash----- Yellow birch-----	67 --- --- --- --- 78 --- 64 --- ---	--- --- --- --- 100 --- 45 --- ---	Eastern white pine, red pine, white spruce.
656B: Stutts-----	Slight	Well suited	Slight	Low	Eastern hemlock----- Eastern white pine-- Jack pine----- Northern red oak---- Paper birch----- Quaking aspen----- Red pine----- Sugar maple----- Yellow birch-----	--- --- 78 71 --- 77 80 --- ---	--- --- 80 68 --- 86 168 --- ---	Eastern white pine, jack pine, red pine.
Zandi-----	Slight	Well suited	Slight	Low	American basswood--- Eastern white pine-- Northern red oak---- Red maple----- Red pine----- Sugar maple----- Yellow birch-----	--- --- --- --- --- 61 ---	--- --- --- --- --- 43 ---	Eastern white pine, red pine.
656C: Stutts-----	Slight	Well suited	Slight	Low	Eastern hemlock----- Eastern white pine-- Jack pine----- Northern red oak---- Paper birch----- Quaking aspen----- Red pine----- Sugar maple----- Yellow birch-----	--- --- 78 71 --- 77 80 --- ---	--- --- 80 68 --- 86 168 --- ---	Eastern white pine, jack pine, red pine.
Zandi-----	Slight	Well suited	Slight	Low	American basswood--- Eastern white pine-- Northern red oak---- Red maple----- Red pine----- Sugar maple----- Yellow birch-----	--- --- --- --- --- 61 ---	--- --- --- --- --- 43 ---	Eastern white pine, red pine.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
656D: Stutts-----	Slight	Poorly suited: Slope	Slight	Low	Eastern hemlock----- Eastern white pine-- Jack pine----- Northern red oak---- Paper birch----- Quaking aspen----- Red pine----- Sugar maple----- Yellow birch-----	--- --- 78 71 --- 77 80 --- ---	--- --- 80 68 --- 86 168 --- ---	Eastern white pine, jack pine, red pine.
Zandi-----	Slight	Poorly suited: Slope	Slight	Low	American basswood--- Eastern white pine-- Northern red oak---- Red maple----- Red pine----- Sugar maple----- Yellow birch-----	--- --- --- --- --- 61 ---	--- --- --- --- --- 43 ---	Eastern white pine, red pine.
680B: Tonkey-----	Slight	Unsuited: Wetness	Severe: Wetness	High: Wetness	American basswood--- Balsam fir----- Northern white cedar Quaking aspen----- Red maple-----	55 --- --- 61 ---	43 --- --- 72 ---	Tamarack, white spruce.
Pleine-----	Slight	Poorly suited: Rock fragments	Severe: Wetness	High: Wetness	Balsam fir----- Balsam poplar----- Black ash----- Northern white cedar Paper birch----- Red maple-----	45 --- --- --- --- ---	83 --- --- --- --- ---	Eastern arborvitae, tamarack.
Annalake-----	Slight	Poorly suited: Wetness	Moderate: Wetness	Low	American basswood--- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Eastern hophornbeam Quaking aspen----- Red maple----- Sugar maple----- White ash----- Yellow birch-----	67 --- --- --- --- 78 --- 64 --- --- ---	--- --- --- --- --- 100 --- 45 --- --- ---	Eastern white pine, red pine, white spruce.
681: Cathro-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam fir----- Black spruce----- Eastern arborvitae-- Paper birch----- Red maple----- Tamarack----- White spruce-----	40 15 15 --- 40 35 ---	72 29 29 --- 29 29 ---	Northern whitecedar, white spruce.
Tonkey-----	Slight	Unsuited: Wetness	Severe: Wetness	High: Wetness	American basswood--- Balsam fir----- Northern white cedar Quaking aspen----- Red maple-----	55 --- --- 61 ---	43 --- --- 72 ---	Tamarack, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
683B: Amasa-----	Slight	Poorly suited: Rock fragments	Slight	Low	American basswood--- American elm----- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Ironwood----- Quaking aspen----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- --- --- --- 75 63 --- ---	--- --- --- --- --- --- 92 42 --- ---	Eastern white pine, red pine.
Oldman-----	Slight	Poorly suited: Wetness Rock fragments	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Green ash----- Northern red oak----- Quaking aspen----- Sugar maple----- Yellow birch-----	84 --- 63 --- --- 66 ---	86 --- 40 --- --- 41 ---	Eastern white pine, red pine.
683C: Amasa-----	Slight	Poorly suited: Rock fragments	Slight	Low	American basswood--- American elm----- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Ironwood----- Quaking aspen----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- --- --- --- 75 63 --- ---	--- --- --- --- --- --- 92 42 --- ---	Eastern white pine, red pine.
Oldman-----	Slight	Poorly suited: Wetness Rock fragments	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Green ash----- Northern red oak----- Quaking aspen----- Sugar maple----- Yellow birch-----	84 --- 63 --- --- 66 ---	86 --- 40 --- --- 41 ---	Eastern white pine, red pine.
683D: Amasa-----	Slight	Poorly suited: Slope Rock fragments	Slight	Low	American basswood--- American elm----- Bigtooth aspen----- Black cherry----- Eastern hemlock----- Ironwood----- Quaking aspen----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- --- --- --- 75 63 --- ---	--- --- --- --- --- --- 92 42 --- ---	Eastern white pine, red pine.
Oldman-----	Slight	Poorly suited: Slope Wetness Rock fragments	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Green ash----- Northern red oak----- Quaking aspen----- Sugar maple----- Yellow birch-----	84 --- 63 --- --- 66 ---	86 --- 40 --- --- 41 ---	Eastern white pine, red pine.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
684B: Amasa-----	Slight	Poorly suited: Rock fragments	Slight	Low	American basswood---	66	---	Eastern white pine, red pine.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Ironwood-----	---	---	
					Quaking aspen-----	75	92	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	
684C: Amasa-----	Slight	Poorly suited: Rock fragments	Slight	Low	American basswood---	66	---	Eastern hemlock, sugar maple, basswood, sugar maple, yellow birch, bigtooth aspen, black cherry, quaking aspen, sugar maple.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Quaking aspen-----	75	92	
					Red maple-----	---	---	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	
684D: Amasa-----	Slight	Poorly suited: Slope Rock fragments	Slight	Low	American basswood---	66	---	Eastern white pine, red pine.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Quaking aspen-----	75	92	
					Red maple-----	---	---	
					Sugar maple-----	63	42	
					Yellow birch-----	---	---	
686B: Annalake-----	Slight	Poorly suited: Wetness	Moderate: Wetness	Low	American basswood---	67	---	Eastern white pine, red pine, white spruce.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Eastern hophornbeam	---	---	
					Quaking aspen-----	78	100	
					Red maple-----	---	---	
					Sugar maple-----	64	45	
					White ash-----	---	---	
					Yellow birch-----	---	---	
Robago-----	Slight	Well suited	Moderate: Wetness	High: Wetness	Balsam poplar-----	---	---	Eastern white pine, white spruce.
					Eastern hemlock-----	---	---	
					Green ash-----	---	---	
					Paper birch-----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Sugar maple-----	---	---	
					Yellow birch-----	---	---	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
688: Cathro-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam fir----- Black spruce----- Eastern arborvitae-- Paper birch----- Red maple----- Tamarack----- White spruce-----	40 15 15 --- 40 35 ---	72 29 29 --- 29 29 ---	Northern whitecedar, white spruce.
Leafriver----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness Droughty	American elm----- Balsam poplar----- Bigtooth aspen----- Black ash----- Quaking aspen----- Sugar maple----- White ash----- Red maple-----	--- --- --- --- --- --- --- 54	--- --- --- --- --- --- --- ---	Balsam fir, black spruce, northern whitecedar, tamarack.
689B: Chabeneau----	Slight	Well suited	Moderate: Wetness	Moderate: Wetness	American basswood--- Northern red oak--- Quaking aspen----- Red pine----- Sugar maple-----	66 73 75 80 63	--- 64 92 168 42	Eastern hemlock, sugar maple, basswood, sugar maple, yellow birch, bigtooth aspen, black cherry, quaking aspen, sugar maple.
Channing-----	Slight	Well suited	Moderate: Wetness	High: Wetness	American basswood--- Northern red oak--- Quaking aspen----- Red pine----- Sugar maple-----	66 73 75 80 63	--- 64 92 168 42	Eastern hemlock, red maple, sugar maple, balsam fir, basswood, black ash, red maple, sugar maple, white ash, white spruce, yellow birch, bigtooth aspen, black cherry, quaking aspen, sugar maple.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
689B: Gogebic-----	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Northern red oak----- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
691B: Dishno-----	Slight	Well suited	Moderate: Wetness	Low	American basswood--- Quaking aspen----- Red pine----- Sugar maple-----	68 80 80 70	--- 95 168 46	Eastern white pine, red pine.
Tula-----	Slight	Poorly suited: Rock fragments	Moderate: Wetness Rooting depth	High: Wetness	Balsam fir----- Eastern hemlock----- Eastern white pine-- Quaking aspen----- Red maple----- Sugar maple-----	--- --- --- --- 65 ---	--- --- --- --- 40 ---	Eastern white pine, white spruce.
Rock outcrop.								
691D: Dishno-----	Slight	Poorly suited: Slope	Moderate: Wetness	Low	American basswood--- Quaking aspen----- Red pine----- Sugar maple-----	68 80 80 70	--- 95 168 46	Eastern white pine, red pine.
Tula-----	Slight	Poorly suited: Rock fragments	Moderate: Wetness Rooting depth	High: Wetness	Balsam fir----- Eastern hemlock----- Eastern white pine-- Quaking aspen----- Red maple----- Sugar maple-----	--- --- --- --- 65 ---	--- --- --- --- 40 ---	Eastern white pine, white spruce.
Rock outcrop.								
693B: Chabeneau-----	Slight	Well suited	Moderate: Wetness	Moderate: Wetness	American basswood--- Quaking aspen----- Red pine----- Sugar maple-----	68 80 80 70	--- 95 168 46	Eastern hemlock, sugar maple, basswood, sugar maple, yellow birch, bigtooth aspen, black cherry, quaking aspen, sugar maple.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
693B: Annalake-----	Slight	Poorly suited: Wetness	Moderate: Wetness	Low	American basswood---	67	---	Eastern hemlock, sugar maple, basswood, eastern hophornbeam, quaking aspen, sugar maple, white ash, yellow birch, bigtooth aspen, black cherry, quaking aspen, sugar maple.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Eastern hophornbeam	---	---	
					Quaking aspen-----	78	100	
					Red maple-----	---	---	
					Sugar maple-----	64	45	
					White ash-----	---	---	
					Yellow birch-----	---	---	
694D: Annalake-----	Moderate: Slope	Poorly suited: Wetness Slope	Moderate: Wetness	Low	American basswood---	67	---	Eastern white pine, red pine, white spruce.
					Bigtooth aspen-----	---	---	
					Black cherry-----	---	---	
					Eastern hemlock-----	---	---	
					Eastern hophornbeam	---	---	
					Quaking aspen-----	78	100	
					Red maple-----	---	---	
					Sugar maple-----	64	45	
					White ash-----	---	---	
					Yellow birch-----	---	---	
Stutts-----	Slight	Poorly suited: Slope	Slight	Low	Eastern hemlock-----	---	---	Eastern white pine, jack pine, red pine.
					Eastern white pine--	---	---	
					Jack pine-----	78	80	
					Northern red oak----	71	68	
					Paper birch-----	---	---	
					Quaking aspen-----	77	86	
					Red pine-----	80	168	
					Sugar maple-----	---	---	
					Yellow birch-----	---	---	
Arnheim-----	Slight	Well suited	Severe: Wetness	High: Wetness	Balsam fir-----	---	---	Northern whitecedar, white spruce.
					Black ash-----	---	---	
					Black spruce-----	---	---	
					Green ash-----	---	---	
					Northern white cedar	---	---	
					Paper birch-----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Tamarack-----	---	---	
					White spruce-----	38	72	
					Yellow birch-----	---	---	

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
5170: Minocqua-----	Slight	Well suited	Severe: Wetness	High: Wetness	Balsam fir----- Balsam poplar----- Bigtooth aspen----- Black ash----- Black spruce----- Eastern hemlock----- Northern white cedar Paper birch----- Quaking aspen----- Red maple----- Sugar maple----- White spruce----- Yellow birch-----	--- --- --- --- --- --- --- --- --- --- --- --- ---	--- --- --- --- --- --- --- --- --- --- --- --- ---	Black ash, black spruce, northern whitecedar, white spruce.
Pleine-----	Slight	Poorly suited: Rock fragments	Severe: Wetness	High: Wetness	Balsam fir----- Balsam poplar----- Black ash----- Northern white cedar Paper birch----- Red maple-----	45 --- --- --- --- ---	83 --- --- --- --- ---	Eastern arborvitae, tamarack.
Cathro-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam fir----- Black spruce----- Eastern arborvitae-- Paper birch----- Red maple----- Tamarack----- White spruce-----	40 15 15 --- 40 35 ---	72 29 29 --- 29 29 ---	Balsam fir, black ash, northern whitecedar, paper birch.
5171B: Tula-----	Slight	Poorly suited: Rock fragments	Moderate: Wetness Rooting depth	High: Wetness	Balsam fir----- Eastern hemlock----- Eastern white pine-- Quaking aspen----- Red maple----- Sugar maple-----	--- --- --- --- 65 ---	--- --- --- --- 40 ---	Eastern white pine, white spruce.
Wormet-----	Slight	Well suited	Moderate: Wetness	High: Wetness	Balsam fir----- Bigtooth aspen----- Eastern arborvitae-- Eastern hemlock----- Eastern white pine-- Jack pine----- Paper birch----- Quaking aspen----- Red maple----- Yellow birch-----	--- --- --- --- --- 51 --- --- 70 65 ---	--- --- --- --- --- 72 --- 86 43 ---	Norway spruce, eastern white pine, red pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
5171B: Gogebic, sandy substratum---	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
5172B: Gogebic, sandy substratum---	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
Pence-----	Slight	Well suited	Slight	Low	Balsam fir----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine-----	--- 57 --- --- --- --- 59	--- 112 --- --- --- --- 99	Eastern white pine, jack pine, red pine.
Cathro-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam fir----- Black spruce----- Eastern arborvitae-- Paper birch----- Red maple----- Tamarack----- White spruce-----	40 15 15 --- 40 35 ---	72 29 29 --- 29 29 ---	Balsam fir, black ash, northern whitecedar, paper birch.
5172C: Gogebic, sandy substratum---	Slight	Poorly suited: Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam--- Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
5172C: Pence-----	Slight	Well suited	Slight	Low	Balsam fir----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine-----	--- 57 --- --- --- --- 59	--- 112 --- --- --- --- 99	Eastern white pine, jack pine, red pine.
Cathro-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	Balsam fir----- Black spruce----- Eastern arborvitae-- Paper birch----- Red maple----- Tamarack----- White spruce-----	40 15 15 --- 40 35 ---	72 29 29 --- 29 29 ---	Balsam fir, black ash, northern whitecedar, paper birch.
5172D: Gogebic, sandy substratum---	Slight	Poorly suited: Slope Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.
Pence-----	Slight	Poorly suited: Slope	Slight	Low	Balsam fir----- Eastern white pine-- Northern red oak---- Paper birch----- Quaking aspen----- Red maple----- Red pine-----	--- 57 --- --- --- --- 59	--- 112 --- --- --- --- 99	Eastern white pine, jack pine, red pine.
Cathro-----	Slight	Poorly suited: Wetness	Severe: Wetness	High: Wetness	---	---	---	Balsam fir, black ash, northern whitecedar, paper birch.
5173D: Gogebic, sandy substratum---	Slight	Poorly suited: Slope Wetness	Severe: Wetness Rooting depth	High: Wetness	American basswood--- Eastern hemlock----- Eastern hophornbeam Northern red oak---- Quaking aspen----- Red maple----- Red pine----- Sugar maple----- White ash----- Yellow birch-----	66 --- --- 73 75 --- 80 63 --- ---	--- --- --- 64 92 --- 168 42 --- ---	Eastern white pine, red pine, white spruce.

See footnote at end of table.

Soil Survey of Gogebic County, Michigan

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Erosion hazard	Site preparation	Windthrow hazard	Seedling mortality	Potential productivity			Suggested trees to plant
					Common trees	Site index	Volume of wood fiber*	
5173D: Pence-----	Slight	Poorly suited: Slope	Slight	Low	Balsam fir-----	---	---	Eastern white pine, jack pine, red pine.
					Eastern white pine--	57	112	
					Northern red oak----	---	---	
					Paper birch-----	---	---	
					Quaking aspen-----	---	---	
					Red maple-----	---	---	
					Red pine-----	59	99	

* Volume is the yield in cubic feet per acre per year at the age of culmination of the mean annual increment for fully stocked stands.

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. Absence of an entry indicates that information was not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
7. Histosols and Aquents							
10: Witbeck-----	Poorly suited: Wetness Rock fragments	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness Rock fragments	Winter	Moderately suited: Rock fragments	Poorly suited: Low strength Rock fragments	Poorly suited: Low strength Rock fragments
12A: Monico-----	Poorly suited: Wetness	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
13B: Argonne-----	Moderately suited: Wetness	Moderately suited: Wetness	Moderately suited: Wetness	Summer, fall, winter.	Well suited	Well suited	Well suited
13C: Argonne-----	Moderately suited: Wetness	Moderately suited: Slope Wetness	Moderately suited: Wetness	Summer, fall, winter.	Well suited	Moderately suited: Slope	Well suited
13D: Argonne-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness	Moderately suited: Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
15B: Wabeno-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness	Moderately suited: Wetness	Summer, fall, winter.	Moderately suited: Low strength	Well suited	Well suited
15C: Wabeno-----	Moderately suited: Wetness Low strength	Moderately suited: Slope Wetness	Moderately suited: Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Slope	Well suited

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
16A: Fence-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
17B: Lode-----	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
17C: Lode-----	Moderately suited: Low strength	Moderately suited: Slope Low strength	Moderately suited: Low strength	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Slope Low strength	Moderately suited: Low strength
20B: Pence-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
Lode-----	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
20C: Pence-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
21: Minocqua-----	Poorly suited: Wetness Low strength	Poorly suited: Wetness Ponding Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
Leafriver-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Well suited	Poorly suited: Low strength	Poorly suited: Low strength
23B: Chabeneau-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
Karlin-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
Pence-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
26B: Stambaugh-----	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
27: Lupton-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
Tawas-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
28: Dawson-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Well suited	Poorly suited: Low strength	Poorly suited: Low strength
Greenwood-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
Loxley-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
29B: Pence, very deep water table----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
31: Evart-----	Poorly suited: Wetness Flooding Low strength	Poorly suited: Ponding Wetness Flooding	Poorly suited: Wetness Low strength	Summer, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
31: Tawas-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
32A: Net-----	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
35A: Beechwood-----	Poorly suited: Wetness	Poorly suited: Wetness Low strength	Poorly suited: Low strength Wetness	Summer, winter.	Well suited	Poorly suited: Low strength	Poorly suited: Low strength
36: Gay-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Summer, winter.	Well suited	Poorly suited: Low strength	Poorly suited: Low strength
Pleine-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Well suited	Poorly suited: Low strength	Poorly suited: Low strength
37B: Gogebic-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
Tula-----	Poorly suited: Wetness	Poorly suited: Wetness	Poorly suited: Wetness	Summer, winter.	Well suited	Well suited	Well suited
Lupton-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
38B: Gogebic, sandy substratum-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
38C: Gogebic, sandy substratum-----	Moderately suited: Wetness	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
38D: Gogebic, sandy substratum-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
39B: Gogebic, sandy substratum-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
39C: Gogebic, sandy substratum-----	Moderately suited: Wetness	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
39D: Gogebic, sandy substratum-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
41: Lupton-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
41:							
Pleine-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Well suited	Poorly suited: Low strength	Poorly suited: Low strength
Cathro-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
42:							
Ausable-----	Poorly suited: Wetness Flooding	Poorly suited: Flooding Wetness Too sandy	Poorly suited: Wetness Too sandy	Winter	Well suited	Well suited	Well suited
Tawas-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
43B:							
Karlin-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
Pence-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
43C:							
Karlin-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
Pence-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
43D:							
Karlin-----	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
Pence-----	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
44B:							
Karlin-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
Keweenaw-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
Sarona, dense substratum-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
44C:							
Karlin-----	Moderately suited: Slope	Poorly suited: Slope	Well suited	Year round	Moderately suited: Slope	Poorly suited: Slope	Well suited
Keweenaw-----	Moderately suited: Slope	Poorly suited: Slope	Well suited	Year round	Moderately suited: Slope	Poorly suited: Slope	Well suited
Sarona, dense substratum-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
44D:							
Karlin-----	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope	Year round	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope
Keweenaw-----	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope	Year round	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope
Sarona, dense substratum-----	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
46C:							
Amasa-----	Moderately suited: Rock fragments	Moderately suited: Slope Low strength Rock fragments	Moderately suited: Low strength Rock fragments	Summer, fall, winter.	Moderately suited: Rock fragments	Moderately suited: Slope Low strength Rock fragments	Moderately suited: Low strength Rock fragments
Karlin-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
46D:							
Amasa-----	Moderately suited: Slope Rock fragments	Poorly suited: Slope Low strength Rock fragments	Moderately suited: Low strength Rock fragments Slope	Year round	Moderately suited: Slope Rock fragments	Poorly suited: Slope Low strength Rock fragments	Moderately suited: Low strength Rock fragments Slope
Karlin-----	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
46E:							
Amasa-----	Poorly suited: Slope Rock fragments	Poorly suited: Slope Low strength Rock fragments	Poorly suited: Slope Low strength Rock fragments	Year round	Poorly suited: Slope Rock fragments	Poorly suited: Slope Low strength Rock fragments	Poorly suited: Slope Low strength Rock fragments
Karlin-----	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope	Year round	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope
46F:							
Amasa-----	Poorly suited: Slope Low strength Rock fragments	Poorly suited: Slope Low strength Rock fragments	Poorly suited: Slope Low strength Rock fragments	Summer, fall, winter.	Poorly suited: Slope Low strength Rock fragments	Poorly suited: Slope Low strength Rock fragments	Poorly suited: Slope Low strength Rock fragments
Karlin-----	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope	Year round	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope
47B:							
Karlin, very deep water table----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
Noseum-----	Moderately suited: Wetness	Moderately suited: Wetness	Moderately suited: Wetness	Year round	Well suited	Well suited	Well suited
Gay-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Summer, winter.	Well suited	Poorly suited: Low strength	Poorly suited: Low strength
48C:							
Karlin-----	Moderately suited: Slope	Poorly suited: Slope	Well suited	Year round	Moderately suited: Slope	Poorly suited: Slope	Well suited
Michigamme-----	Moderately suited: Restrictive layer	Moderately suited: Slope Low strength	Moderately suited: Low strength	Summer, fall, winter.	Moderately suited: Restrictive layer	Moderately suited: Slope Low strength	Moderately suited: Low strength
48F:							
Karlin-----	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope	Year round	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
48F: Michigamme-----	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Summer, fall, winter.	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength
49B: Pelissier-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
Sarwet-----	Moderately suited: Wetness	Moderately suited: Wetness	Moderately suited: Wetness	Year round	Well suited	Well suited	Well suited
49C: Pelissier-----	Moderately suited: Slope Sandiness	Moderately suited: Slope	Well suited	Year round	Moderately suited: Slope	Moderately suited: Slope	Well suited
Sarwet-----	Moderately suited: Wetness Slope	Moderately suited: Slope Wetness	Moderately suited: Wetness	Year round	Moderately suited: Slope	Moderately suited: Slope	Well suited
49D: Pelissier-----	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
52B: Pence-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
Vilas-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
52C: Pence-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
Vilas-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
53B: Manitowish-----	Moderately suited: Wetness	Moderately suited: Wetness	Moderately suited: Wetness	Year round	Well suited	Well suited	Well suited
Croswell-----	Moderately suited: Sandiness	Moderately suited: Too sandy	Moderately suited: Too sandy	Spring, fall, winter.	Well suited	Well suited	Well suited
57B: Karlin-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
Manitowish-----	Moderately suited: Wetness	Moderately suited: Wetness	Moderately suited: Wetness	Year round	Well suited	Well suited	Well suited

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
57C:							
Karlin-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
Manitowish-----	Moderately suited: Wetness	Moderately suited: Slope Wetness	Moderately suited: Wetness	Year round	Well suited	Moderately suited: Slope	Well suited
58B:							
Vilas, very deep water table----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
Croswell-----	Moderately suited: Sandiness	Moderately suited: Too sandy	Moderately suited: Too sandy	Year round	Well suited	Well suited	Well suited
Pence, very deep water table----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
61:							
Tawas-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
Kinross-----	Poorly suited: Wetness Sandiness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Summer, winter.	Well suited	Poorly suited: Low strength	Poorly suited: Low strength
62B:							
Pelkie-----	Moderately suited: Flooding	Moderately suited: Flooding	Well suited	Summer, winter.	Well suited	Well suited	Well suited
83:							
Bowstring-----	Poorly suited: Wetness Flooding Low strength	Poorly suited: Ponding Flooding Wetness	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
141D:							
Oldman-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness Low strength Slope	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Slope Low strength	Moderately suited: Low strength

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
141E: Oldman-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength
141F: Porkies-----	Poorly suited: Slope	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Summer, fall, winter.	Poorly suited: Slope	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength
214B: Amnicon-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
Bergland-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Stickiness	Poorly suited: Wetness Low strength Stickiness	Summer, winter.	Well suited	Moderately suited: Low strength Stickiness	Moderately suited: Low strength Stickiness
216B: Amnicon-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
217A: Cuttie-----	Poorly suited: Wetness Low strength Stickiness	Poorly suited: Wetness Low strength Stickiness	Poorly suited: Wetness Low strength Stickiness	Summer, winter.	Moderately suited: Low strength Stickiness	Moderately suited: Low strength Stickiness	Moderately suited: Low strength Stickiness
218: Bergland-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Stickiness	Poorly suited: Wetness Low strength Stickiness	Summer, winter.	Well suited	Moderately suited: Low strength Stickiness	Moderately suited: Low strength Stickiness
219B: Payseor-----	Poorly suited: Wetness Stickiness Low strength	Poorly suited: Wetness Low strength Stickiness	Poorly suited: Wetness Low strength Stickiness	Summer, winter.	Moderately suited: Low strength Stickiness	Moderately suited: Low strength Stickiness	Moderately suited: Low strength Stickiness

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
219B: Froberg-----	Well suited	Moderately suited: Low strength	Moderately suited: Low strength	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
222: Matchwood-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Stickiness	Poorly suited: Wetness Low strength Stickiness	Summer, winter.	Moderately suited: Low strength	Moderately suited: Low strength Stickiness	Moderately suited: Low strength Stickiness
225A: Cuttre-----	Poorly suited: Wetness Low strength Stickiness	Poorly suited: Wetness Low strength Stickiness	Poorly suited: Wetness Low strength Stickiness	Summer, winter.	Moderately suited: Low strength Stickiness	Moderately suited: Low strength Stickiness	Moderately suited: Low strength Stickiness
Bergland-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Stickiness	Poorly suited: Wetness Low strength Stickiness	Summer, winter.	Well suited	Moderately suited: Low strength Stickiness	Moderately suited: Low strength Stickiness
226B: Froberg-----	Well suited	Moderately suited: Low strength	Moderately suited: Low strength	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
230B: Moquah-----	Well suited	Moderately suited: Low strength	Moderately suited: Low strength	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
Arnheim-----	Poorly suited: Wetness Flooding	Poorly suited: Ponding Flooding Wetness	Poorly suited: Wetness Low strength	Summer, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
231: Matchwood-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Stickiness	Poorly suited: Wetness Low strength Stickiness	Summer, winter.	Moderately suited: Low strength	Moderately suited: Low strength Stickiness	Moderately suited: Low strength Stickiness

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
231: Dorval-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
233: Schaat Creek----	Poorly suited: Wetness Flooding	Poorly suited: Flooding Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
239D: Miskoaki-----	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope	Year round	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
277B: Kellogg, sandy substratum-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
Allendale-----	Poorly suited: Wetness	Poorly suited: Wetness Too sandy	Poorly suited: Wetness Too sandy	Summer, winter.	Well suited	Well suited	Well suited
280B: Flintsteel-----	Poorly suited: Wetness	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
280C: Flintsteel-----	Poorly suited: Wetness	Poorly suited: Wetness Low strength Slope	Poorly suited: Wetness Low strength	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
282B: Big Iron-----	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
Flintsteel-----	Poorly suited: Wetness	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
283B:							
Loggerhead-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
Noseum-----	Moderately suited: Wetness	Moderately suited: Wetness	Moderately suited: Wetness	Year round	Well suited	Well suited	Well suited
Ubyl-----	Well suited	Moderately suited: Slope	Well suited	Summer, fall, winter.	Well suited	Moderately suited: Slope	Well suited
283C:							
Loggerhead-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness Low strength Slope	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Slope Low strength	Moderately suited: Low strength
Noseum-----	Moderately suited: Wetness	Moderately suited: Wetness Slope	Moderately suited: Wetness	Year round	Well suited	Moderately suited: Slope	Well suited
Ubyl-----	Well suited	Moderately suited: Slope	Well suited	Summer, fall, winter.	Well suited	Moderately suited: Slope	Well suited
284:							
Aquents.							
Gull Point-----	Poorly suited: Wetness Flooding Low strength	Poorly suited: Flooding Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
285F:							
Rockland-----	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Summer, fall, winter.	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength
Arnheim-----	Poorly suited: Wetness Flooding	Poorly suited: Ponding Flooding Wetness	Poorly suited: Wetness Low strength	Summer, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
286A: Big Iron-----	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
Belding-----	Poorly suited: Wetness	Poorly suited: Wetness	Poorly suited: Wetness	Summer, winter.	Well suited	Well suited	Well suited
287: Trap Falls-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
Tonkey-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
289B: Amasa-----	Moderately suited: Rock fragments	Moderately suited: Low strength Rock fragments	Moderately suited: Low strength Rock fragments	Summer, fall, winter.	Moderately suited: Rock fragments	Moderately suited: Low strength Rock fragments	Moderately suited: Low strength Rock fragments
290B: Flintsteel-----	Poorly suited: Wetness	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
290C: Flintsteel-----	Poorly suited: Wetness	Poorly suited: Wetness Slope Low strength	Poorly suited: Wetness Low strength	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
291B: Kalkaska-----	Moderately suited: Sandiness	Moderately suited: Too sandy	Moderately suited: Too sandy	Spring, fall, winter.	Well suited	Well suited	Well suited
291D: Kalkaska-----	Moderately suited: Sandiness	Moderately suited: Slope Too sandy	Moderately suited: Too sandy	Spring, fall, winter.	Well suited	Moderately suited: Slope	Well suited

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
292B:							
Manido-----	Moderately suited: Wetness	Moderately suited: Wetness	Moderately suited: Wetness	Year round	Well suited	Well suited	Well suited
Richter-----	Poorly suited: Wetness	Poorly suited: Wetness	Poorly suited: Wetness	Summer, winter.	Well suited	Well suited	Well suited
293A:							
Wainola-----	Poorly suited: Wetness Sandiness	Poorly suited: Wetness Too sandy	Poorly suited: Wetness Too sandy	Summer, winter.	Well suited	Well suited	Well suited
Trap Falls-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
296B:							
Manido-----	Moderately suited: Wetness	Moderately suited: Wetness	Moderately suited: Wetness	Year round	Well suited	Well suited	Well suited
Fence-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Year round	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
Gogebic, sandy substratum-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
296D:							
Manido-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness	Moderately suited: Wetness Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
Sporley-----	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
Gogebic, sandy substratum-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
299B:							
Zandi-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
Amasa-----	Well suited	Moderately suited: Low strength	Moderately suited: Low strength	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
Flintsteel-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
299C:							
Zandi-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
Amasa-----	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
Flintsteel-----	Moderately suited: Wetness	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
301A:							
Moodig-----	Poorly suited: Wetness	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
302B:							
Manitowish-----	Moderately suited: Wetness	Moderately suited: Wetness	Moderately suited: Wetness	Year round	Well suited	Well suited	Well suited
302C:							
Manitowish-----	Moderately suited: Wetness	Moderately suited: Slope Wetness	Moderately suited: Wetness	Year round	Well suited	Moderately suited: Slope	Well suited
303:							
Bowstring-----	Poorly suited: Wetness Flooding	Poorly suited: Ponding Flooding Wetness	Poorly suited: Low strength Wetness	Winter	Well suited	Poorly suited: Low strength	Poorly suited: Low strength

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
303: Arnheim-----	Poorly suited: Wetness Flooding	Poorly suited: Ponding Flooding Wetness	Poorly suited: Wetness Low strength	Summer, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
305B: Keweenaw-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
Siskiwit-----	Moderately suited: Wetness	Moderately suited: Wetness	Moderately suited: Wetness	Year round	Well suited	Well suited	Well suited
305C: Keweenaw-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
Siskiwit-----	Moderately suited: Wetness	Moderately suited: Slope Wetness	Moderately suited: Wetness	Year round	Well suited	Moderately suited: Slope	Well suited
307: Lupton-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
Cathro-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
309: Cathro-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
310B: Gogebic-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
310C: Gogebic-----	Moderately suited: Wetness	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
310D: Gogebic-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
310E: Schweitzer-----	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope	Year round	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope
311B: Tula-----	Poorly suited: Wetness	Poorly suited: Wetness	Poorly suited: Wetness	Summer, winter.	Well suited	Well suited	Well suited
Gogebic-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
312A: Tula-----	Poorly suited: Wetness	Poorly suited: Wetness	Poorly suited: Wetness	Summer, winter.	Well suited	Well suited	Well suited
Foxpaw-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
Gay-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Summer, winter.	Well suited	Poorly suited: Low strength	Poorly suited: Low strength
316: Gay-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
317B: Gogebic-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
317C: Gogebic-----	Moderately suited: Wetness	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
317D: Gogebic-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
319B: McMillan-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
Noseum-----	Moderately suited: Wetness	Moderately suited: Wetness	Moderately suited: Wetness	Year round	Well suited	Well suited	Well suited
319C: McMillan-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
Islandlake-----	Moderately suited: Sandiness	Moderately suited: Slope Too sandy	Moderately suited: Too sandy	Year round	Well suited	Moderately suited: Slope	Well suited
319D: McMillan-----	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
Islandlake-----	Moderately suited: Slope Sandiness	Poorly suited: Slope Too sandy	Moderately suited: Too sandy Slope	Spring, fall, winter.	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
319E: McMillan-----	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope	Year round	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope
Islandlake-----	Poorly suited: Slope	Poorly suited: Slope Too sandy	Poorly suited: Too sandy	Spring, fall, winter.	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
322B:							
Stutts-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
Keweenaw-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
322C:							
Stutts-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
Keweenaw-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
322D:							
Stutts-----	Moderately suited: Slope Sandiness	Poorly suited: Slope	Moderately suited: Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
Keweenaw-----	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
323B:							
Keweenaw-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
Kalkaska-----	Moderately suited: Sandiness	Moderately suited: Too sandy	Moderately suited: Too sandy	Spring, fall, winter.	Well suited	Well suited	Well suited
323C:							
Keweenaw-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
Kalkaska-----	Moderately suited: Sandiness	Moderately suited: Slope Too sandy	Moderately suited: Too sandy	Spring, fall, winter.	Well suited	Moderately suited: Slope	Well suited
323D:							
Keweenaw-----	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
Kalkaska-----	Moderately suited: Slope Sandiness	Poorly suited: Slope Too sandy	Moderately suited: Too sandy Slope	Spring, fall, winter.	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
325B:							
Siskiwit-----	Moderately suited: Wetness	Moderately suited: Wetness	Moderately suited: Wetness	Year round	Well suited	Well suited	Well suited

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
325B: Gogebic-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
325C: Siskiwit-----	Moderately suited: Wetness	Moderately suited: Slope Wetness	Moderately suited: Wetness	Year round	Well suited	Moderately suited: Slope	Well suited
Gogebic-----	Moderately suited: Wetness	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
327: Foxpaw-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
Sarwet-----	Moderately suited: Wetness	Moderately suited: Wetness	Moderately suited: Wetness	Year round	Well suited	Well suited	Well suited
328B: Annalake-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
Karlin-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
328C: Annalake-----	Moderately suited: Wetness Low strength	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Slope Low strength	Moderately suited: Low strength
Karlin-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
328D: Karlin-----	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
328D: Zandi-----	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
329A: Tula-----	Poorly suited: Wetness	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
351B: Gogebic-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
351C: Gogebic-----	Moderately suited: Wetness	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
351D: Gogebic-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
351E: Schweitzer-----	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope	Year round	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope
351F: Schweitzer-----	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope	Year round	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope
353A: Tula-----	Poorly suited: Wetness	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
354B: Gogebic-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
354C: Gogebic-----	Moderately suited: Wetness	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
354D: Gogebic-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
354E: Schweitzer-----	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope	Year round	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope
354F: Schweitzer-----	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope	Year round	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope
363C: Talus.							
Arcadian-----	Poorly suited: Restrictive layer	Moderately suited: Slope	Well suited	Year round	Poorly suited: Restrictive layer	Moderately suited: Slope	Well suited
363D: Talus.							
Arcadian-----	Poorly suited: Restrictive layer Slope	Poorly suited: Slope	Moderately suited: Slope	Year round	Poorly suited: Restrictive layer Slope	Poorly suited: Slope	Moderately suited: Slope
363E: Talus.							
Arcadian-----	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope	Year round	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope
363F: Talus.							
Arcadian-----	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope	Year round	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
364F. Talus							
365F. Rock outcrop							
369C: Dishno-----	Moderately suited: Wetness Low strength	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Slope Low strength	Moderately suited: Low strength
Gogebic-----	Moderately suited: Wetness	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
Peshekee-----	Poorly suited: Restrictive layer	Moderately suited: Slope Low strength	Moderately suited: Low strength	Summer, fall, winter.	Poorly suited: Restrictive layer	Moderately suited: Slope Low strength	Moderately suited: Low strength
Rock outcrop.							
369D: Dishno-----	Moderately suited: Slope Wetness Restrictive layer	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope Restrictive layer	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
Gogebic-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
Peshekee-----	Poorly suited: Restrictive layer Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope	Summer, fall, winter.	Poorly suited: Restrictive layer Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
Rock outcrop.							
369E: Michigamme-----	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Summer, fall, winter.	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
369E:							
Schweitzer-----	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope	Year round	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope
Peshekee-----	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Summer, fall, winter.	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength
Rock outcrop.							
369F:							
Michigamme-----	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Summer, fall, winter.	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength
Schweitzer-----	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope	Year round	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope
Peshekee-----	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Summer, fall, winter.	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength
Rock outcrop.							
370E:							
Peshekee-----	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Summer, fall, winter.	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength
Rock outcrop.							
370F:							
Peshekee-----	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Summer, fall, winter.	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength
Rock outcrop.							
375. Dumps and Pits, mine							

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
380: Beseman-----	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength Ponding	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
Greenwood-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
382: Cathro-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
Arnheim-----	Poorly suited: Wetness Flooding	Poorly suited: Ponding Flooding Wetness	Poorly suited: Wetness Low strength	Summer, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
388: Gay-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Summer, winter.	Well suited	Poorly suited: Low strength	Poorly suited: Low strength
Tula-----	Poorly suited: Wetness	Poorly suited: Wetness	Poorly suited: Wetness	Summer, winter.	Well suited	Well suited	Well suited
398B: Tula-----	Poorly suited: Wetness	Poorly suited: Wetness	Poorly suited: Wetness	Summer, winter.	Well suited	Well suited	Well suited
Gay-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Summer, winter.	Well suited	Poorly suited: Low strength	Poorly suited: Low strength
Wakefield-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
418: Loxley-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
Beseman-----	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength Ponding	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
419: Pleine-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Well suited	Poorly suited: Low strength	Poorly suited: Low strength
Cathro-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
Gay-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Summer, winter.	Well suited	Poorly suited: Low strength	Poorly suited: Low strength
424: Gay-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Summer, winter.	Well suited	Poorly suited: Low strength	Poorly suited: Low strength
425: Foxpaw-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
Gay-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Summer, winter.	Well suited	Poorly suited: Low strength	Poorly suited: Low strength

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
428C: Gogebic-----	Moderately suited: Wetness	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
Michigamme-----	Moderately suited: Restrictive layer	Moderately suited: Slope Low strength	Moderately suited: Low strength	Summer, fall, winter.	Moderately suited: Restrictive layer	Moderately suited: Slope Low strength	Moderately suited: Low strength
428D: Gogebic-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
Michigamme-----	Poorly suited: Restrictive layer Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope	Summer, fall, winter.	Poorly suited: Restrictive layer Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
429B: Gogebic-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
Peshekee-----	Poorly suited: Restrictive layer	Moderately suited: Low strength	Moderately suited: Low strength	Summer, fall, winter.	Poorly suited: Restrictive layer	Moderately suited: Low strength	Moderately suited: Low strength
429C: Gogebic-----	Moderately suited: Wetness	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
Peshekee-----	Poorly suited: Restrictive layer	Moderately suited: Slope Low strength	Moderately suited: Low strength	Summer, fall, winter.	Poorly suited: Restrictive layer	Moderately suited: Slope Low strength	Moderately suited: Low strength

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
429D: Gogebic-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
Peshekee-----	Poorly suited: Restrictive layer Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope	Summer, fall, winter.	Poorly suited: Restrictive layer Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
429E: Schweitzer-----	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope	Year round	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope
Peshekee-----	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Summer, fall, winter.	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength
430B: Stutts-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
430C: Stutts-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
430D: Stutts-----	Moderately suited: Slope Sandiness	Poorly suited: Slope	Moderately suited: Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
430E: Stutts-----	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope	Year round	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope
432C: Gogebic-----	Moderately suited: Wetness	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
Michigamme-----	Moderately suited: Restrictive layer	Moderately suited: Slope Low strength	Moderately suited: Low strength	Summer, fall, winter.	Moderately suited: Restrictive layer	Moderately suited: Slope Low strength	Moderately suited: Low strength
Rock outcrop.							

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
432D: Gogebic-----	Moderately suited: Wetness Slope	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
Michigamme-----	Moderately suited: Restrictive layer Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope	Summer, fall, winter.	Moderately suited: Restrictive layer Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
Rock outcrop.							
432E: Schweitzer-----	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope	Year round	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope
Michigamme-----	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Summer, fall, winter.	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength
Rock outcrop.							
432F: Schweitzer-----	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope	Year round	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope
Michigamme-----	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Summer, fall, winter.	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength
Rock outcrop.							
433B: McMillan-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
433C: McMillan-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
433D: McMillan-----	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
435C:							
Kalkaska-----	Moderately suited: Sandiness	Moderately suited: Slope Too sandy	Moderately suited: Too sandy	Spring, fall, winter.	Well suited	Moderately suited: Slope	Well suited
Waiska-----	Moderately suited: Sandiness	Moderately suited: Slope Too sandy	Moderately suited: Too sandy	Spring, fall, winter.	Well suited	Moderately suited: Slope	Well suited
435D:							
Kalkaska-----	Moderately suited: Slope Sandiness	Poorly suited: Slope Too sandy	Moderately suited: Too sandy Slope	Spring, fall, winter.	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
Waiska-----	Moderately suited: Slope Sandiness	Poorly suited: Slope Too sandy	Moderately suited: Too sandy Slope	Spring, fall, winter.	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
435E:							
Kalkaska-----	Poorly suited: Slope	Poorly suited: Slope Too sandy	Poorly suited: Slope Too sandy	Spring, fall, winter.	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope
Waiska-----	Poorly suited: Slope	Poorly suited: Slope Too sandy	Poorly suited: Slope Too sandy	Spring, fall, winter.	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope
437B:							
Manitowish-----	Moderately suited: Wetness	Moderately suited: Wetness	Moderately suited: Wetness	Year round	Well suited	Well suited	Well suited
Channing-----	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
448F:							
Rockland-----	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Summer, fall, winter.	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength
Rock outcrop.							
449C:							
Flintsteel-----	Moderately suited: Wetness	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
449C: Minocqua-----	Poorly suited: Wetness Low strength	Poorly suited: Wetness Ponding Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
452F: Rockland-----	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Summer, fall, winter.	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength
460B: Belding-----	Poorly suited: Wetness	Poorly suited: Wetness	Poorly suited: Wetness	Summer, winter.	Well suited	Well suited	Well suited
Manido-----	Moderately suited: Wetness	Moderately suited: Wetness	Moderately suited: Wetness	Year round	Well suited	Well suited	Well suited
461B: Loggerhead-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
462C: Nonesuch-----	Moderately suited: Wetness Low strength	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Slope Low strength	Moderately suited: Low strength
Rock outcrop.							
509: Cathro-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
Minocqua-----	Poorly suited: Wetness Low strength	Poorly suited: Wetness Ponding Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
511A: Gogebic-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
Tula-----	Poorly suited: Wetness	Poorly suited: Wetness	Poorly suited: Wetness	Summer, winter.	Well suited	Well suited	Well suited
Chabeneau-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
519B: Gogebic-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
Karlin-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
519C: Gogebic-----	Moderately suited: Wetness	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
Karlin-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
519D: Gogebic-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
Karlin-----	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
522. Pits, sand and gravel							

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
523D: Gogebic, sandy substratum-----	Moderately suited: Wetness Slope	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
Karlin-----	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
524C: Waika-----	Moderately suited: Sandiness	Moderately suited: Slope Too sandy	Moderately suited: Too sandy	Spring, fall, winter.	Well suited	Moderately suited: Slope	Well suited
Amasa-----	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
524D: Waika-----	Moderately suited: Slope Sandiness	Poorly suited: Slope Too sandy	Moderately suited: Too sandy Slope	Spring, fall, winter.	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
Amasa-----	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
524E: Waika-----	Poorly suited: Slope	Poorly suited: Slope Too sandy	Poorly suited: Slope Too sandy	Spring, fall, winter.	Poorly suited: Slope	Poorly suited: Slope	Poorly suited: Slope
Amasa-----	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Summer, fall, winter.	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength
527B: Wakefield-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
527C: Wakefield-----	Moderately suited: Wetness	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
527D: Wakefield-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
528B: Gogebic-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
Annalake-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
528C: Gogebic-----	Moderately suited: Wetness	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
Annalake-----	Moderately suited: Wetness Low strength	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Slope Low strength	Moderately suited: Low strength
528D: Gogebic-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
Annalake-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
551B: Gogebic-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
Dishno-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
566. Beach, rubbly							
576B: Flintsteel-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
Loggerhead-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
576C: Flintsteel-----	Moderately suited: Wetness	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
Loggerhead-----	Moderately suited: Wetness Low strength	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Slope Low strength	Moderately suited: Low strength
576D: Flintsteel-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
Loggerhead-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
577B:							
Loggerhead-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
Chabeneau-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
Arcadian-----	Poorly suited: Restrictive layer	Well suited	Well suited	Year round	Poorly suited: Restrictive layer	Well suited	Well suited
577C:							
Loggerhead-----	Moderately suited: Wetness Low strength	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Slope Low strength	Moderately suited: Low strength
Chabeneau-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength Slope	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength Slope	Moderately suited: Low strength
Arcadian-----	Poorly suited: Restrictive layer	Moderately suited: Slope	Well suited	Year round	Poorly suited: Restrictive layer	Moderately suited: Slope	Well suited
577D:							
Loggerhead-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
Chabeneau-----	Moderately suited: Wetness Slope	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Year round	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength
Arcadian-----	Poorly suited: Restrictive layer Slope	Poorly suited: Slope	Moderately suited: Slope	Year round	Poorly suited: Restrictive layer Slope	Poorly suited: Slope	Moderately suited: Slope

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
578D:							
Arcadian-----	Poorly suited: Restrictive layer Slope	Poorly suited: Slope	Moderately suited: Slope	Year round	Poorly suited: Restrictive layer Slope	Poorly suited: Slope	Moderately suited: Slope
Keweenaw-----	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
625B:							
Fence-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Year round	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
625C:							
Fence-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Year round	Moderately suited: Low strength	Moderately suited: Slope Low strength	Moderately suited: Low strength
626D:							
Sporley-----	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
626E:							
Sporley-----	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Summer, fall, winter.	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength	Poorly suited: Slope Low strength
648B:							
Annalake-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
648C:							
Annalake-----	Moderately suited: Wetness Low strength	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Slope Low strength	Moderately suited: Low strength

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
650: Leafriver-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Well suited	Poorly suited: Low strength	Poorly suited: Low strength
652B: Manido-----	Moderately suited: Wetness	Moderately suited: Wetness	Moderately suited: Wetness	Year round	Well suited	Well suited	Well suited
Annalake-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
656B: Stutts-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
Zandi-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
656C: Stutts-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
Zandi-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
656D: Stutts-----	Moderately suited: Slope Sandiness	Poorly suited: Slope	Moderately suited: Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
Zandi-----	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
680B: Tonkey-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
Pleine-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Well suited	Poorly suited: Low strength	Poorly suited: Low strength

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
680B: Annalake-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
681: Cathro-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
Tonkey-----	Poorly suited: Wetness	Poorly suited: Ponding Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
683B: Amasa-----	Well suited	Moderately suited: Low strength	Moderately suited: Low strength	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
Oldman-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
683C: Amasa-----	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
Oldman-----	Moderately suited: Wetness Low strength	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Slope Low strength	Moderately suited: Low strength
683D: Amasa-----	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
683D: Oldman-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
684B: Amasa-----	Moderately suited: Rock fragments	Moderately suited: Rock fragments Low strength	Moderately suited: Rock fragments Low strength	Summer, fall, winter.	Moderately suited: Rock fragments	Moderately suited: Rock fragments Low strength	Moderately suited: Rock fragments Low strength
684C: Amasa-----	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
684D: Amasa-----	Moderately suited: Slope Rock fragments	Poorly suited: Slope Low strength Rock fragments	Moderately suited: Low strength Rock fragments Slope	Summer, fall, winter.	Moderately suited: Slope Rock fragments	Poorly suited: Slope Low strength Rock fragments	Moderately suited: Low strength Rock fragments Slope
686B: Annalake-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
Robago-----	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
688: Cathro-----	Poorly suited: Wetness Flooding Low strength	Poorly suited: Ponding Flooding Wetness	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
Leafriver-----	Poorly suited: Wetness Flooding	Poorly suited: Ponding Flooding Wetness	Poorly suited: Low strength Wetness	Winter	Well suited	Poorly suited: Low strength	Poorly suited: Low strength

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
689B: Chabeneau-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
Channing-----	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
Gogebic-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
691B: Dishno-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
Tula-----	Poorly suited: Wetness	Poorly suited: Wetness	Poorly suited: Wetness	Summer, winter.	Well suited	Well suited	Well suited
Rock outcrop.							
691D: Dishno-----	Moderately suited: Wetness Slope Restrictive layer	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Slope Restrictive layer	Poorly suited: Slope Low strength	Moderately suited: Low strength
Tula-----	Poorly suited: Wetness	Poorly suited: Wetness	Poorly suited: Wetness	Summer, winter.	Well suited	Well suited	Well suited
Rock outcrop.							
693B: Chabeneau-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
Annalake-----	Moderately suited: Wetness Low strength	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength

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Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
694D:							
Annalake-----	Moderately suited: Wetness Slope	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength
Stutts-----	Moderately suited: Slope Sandiness	Poorly suited: Slope	Well suited	Year round	Moderately suited: Slope	Poorly suited: Slope	Well suited
Arnheim-----	Poorly suited: Wetness Flooding	Poorly suited: Ponding Flooding Wetness	Poorly suited: Wetness Low strength	Summer, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
5170:							
Minocqua-----	Poorly suited: Wetness Low strength	Poorly suited: Wetness Ponding Low strength	Poorly suited: Wetness Low strength	Summer, winter.	Moderately suited: Low strength	Moderately suited: Low strength	Moderately suited: Low strength
Pleine-----	Poorly suited: Wetness Rock fragments	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness Rock fragments	Winter	Moderately suited: Rock fragments	Poorly suited: Low strength Rock fragments	Poorly suited: Low strength Rock fragments
Cathro-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
5171B:							
Tula-----	Poorly suited: Wetness	Poorly suited: Wetness	Poorly suited: Wetness	Summer, winter.	Well suited	Well suited	Well suited
Wormet-----	Poorly suited: Wetness	Poorly suited: Wetness	Poorly suited: Wetness	Summer, winter.	Well suited	Well suited	Well suited
Gogebic, sandy substratum-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
5172B: Gogebic, sandy substratum-----	Moderately suited: Wetness	Moderately suited: Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Low strength	Moderately suited: Low strength
Pence-----	Well suited	Well suited	Well suited	Year round	Well suited	Well suited	Well suited
Cathro-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
5172C: Gogebic, sandy substratum-----	Moderately suited: Wetness	Moderately suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness	Summer, fall, winter.	Well suited	Moderately suited: Slope Low strength	Moderately suited: Low strength
Pence-----	Well suited	Moderately suited: Slope	Well suited	Year round	Well suited	Moderately suited: Slope	Well suited
Cathro-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength
5172D: Gogebic, sandy substratum-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
Pence-----	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope
Cathro-----	Poorly suited: Wetness Low strength	Poorly suited: Ponding Wetness Low strength	Poorly suited: Low strength Wetness	Winter	Poorly suited: Low strength	Poorly suited: Low strength	Poorly suited: Low strength

Soil Survey of Gogebic County, Michigan

Table 8.--Equipment Limitations on Forestland--Continued

Map symbol and soil name	Rating class and limiting features for most limiting season(s)			Preferred operating season(s)	Rating class and limiting features for preferred operating season(s)		
	Haul roads	Log landings	Logging areas and skid roads		Haul roads	Log landings	Logging areas and skid roads
5173D: Gogebic, sandy substratum-----	Moderately suited: Slope Wetness	Poorly suited: Slope Wetness Low strength	Moderately suited: Low strength Wetness Slope	Summer, fall, winter.	Moderately suited: Slope	Poorly suited: Slope Low strength	Moderately suited: Low strength Slope
Pence-----	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope	Year round	Moderately suited: Slope	Poorly suited: Slope	Moderately suited: Slope

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities

(Absence of an entry indicates that information was not available)

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
7. Histosols and Aquents				
10: Witbeck-----	black ash	FRNI	balsam fir	ABBA
	eastern hemlock	TSCA	northern whitecedar	THOC2
	paper birch	BEP4	red maple	ACRU
	red maple	ACRU	speckled alder	ALINR
	balsam fir	ABBA	sedge	CAREX
	black spruce	PIMA	yellow beadleily	CLBO3
	northern whitecedar	THOC2	bunchberry dogwood	COCA13
	tamarack	LALA	goldthread	COPTI
			spinulose woodfern	DRCA11
			creeping snowberry	GAHI2
			Canada mayflower	MACA4
			wood sorrel	OXMO
			dewberry	RUHIS3
			sphagnum moss	SPHAG*
			starflower	TRBO2
			eastern hemlock	TSCA
			blueberry	VACCI
12A: Monico-----	American elm	ULAM	eastern hemlock	TSCA
	balsam poplar	POBA2	American fly	LOCA7
	bigtooth aspen	POGR4	honeysuckle	
	eastern hemlock	TSCA	twisted stalk	STAM2
	northern whitecedar	THOC2	northern whitecedar	THOC2
	paper birch	BEP4	balsam fir	ABBA
	quaking aspen	POTR5	red maple	ACRU
	sugar maple	ACSA3	sugar maple	ACSA3
	yellow birch	BEAL2	yellow birch	BEAL2
	American basswood	TIAM	sedge	CAREX
	balsam fir	ABBA	yellow beadleily	CLBO3
	black spruce	PIMA	Canada mayflower	MACA4
	red maple	ACRU	wood sorrel	OXMO
	white ash	FRAM2	white spruce	PIGL
	white spruce	PIGL	grasses	POA
			brackenfern	PTERI
			starflower	TRBO2
			shining clubmoss	HULU2
			wintergreen	GAPR2
			woodfern	DRYOP
			goldthread	COPTI
			bunchberry dogwood	COCA13
13B: Argonne-----	American basswood	TIAM	spinulose woodfern	DRCA11
	bigtooth aspen	POGR4	American elm	ULAM
	black cherry	PRSE2	eastern hemlock	TSCA
	eastern hemlock	TSCA	American basswood	TIAM
	quaking aspen	POTR5	Canada mayflower	MACA4
	red maple	ACRU	twisted stalk	STAM2
	yellow birch	BEAL2	red elderberry	SACA11
	sugar maple	ACSA3	hairy Solomon's seal	POPU4
			sedge	CAREX
			ladyfern	ATHYR
			sugar maple	ACSA3
			red maple	ACRU
			yellow birch	BEAL2

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
13C:				
Argonne-----	American basswood	TIAM	sugar maple	ACSA3
	bigtooth aspen	POGR4	twisted stalk	STAM2
	black cherry	PRSE2	American basswood	TIAM
	eastern hemlock	TSCA	eastern hemlock	TSCA
	quaking aspen	POTR5	American elm	ULAM
	red maple	ACRU	red elderberry	SACA11
	yellow birch	BEAL2	red maple	ACRU
	sugar maple	ACSA3	hairy Solomon's seal	POPU4
			Canada mayflower	MACA4
			spinulose woodfern	DRCA11
			sedge	CAREX
			yellow birch	BEAL2
			ladyfern	ATHYR
13D:				
Argonne-----	American basswood	TIAM	sedge	CAREX
	bigtooth aspen	POGR4	twisted stalk	STAM2
	black cherry	PRSE2	spinulose woodfern	DRCA11
	eastern hemlock	TSCA	yellow birch	BEAL2
	quaking aspen	POTR5	eastern hemlock	TSCA
	red maple	ACRU	American basswood	TIAM
	yellow birch	BEAL2	red maple	ACRU
	sugar maple	ACSA3	ladyfern	ATHYR
			American elm	ULAM
			Canada mayflower	MACA4
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			sugar maple	ACSA3
15B:				
Wabeno-----	American elm	ULAM	blue cohosh	CATH2
	bigtooth aspen	POGR4	eastern hemlock	TSCA
	black cherry	PRSE2	Canada mayflower	MACA4
	eastern hemlock	TSCA	Canada white violet	VICA4
	eastern hophornbeam	OSVI	eastern hophornbeam	OSVI
	white ash	FRAM2	downy yellow violet	VIPU3
	yellow birch	BEAL2	American elm	ULAM
	American basswood	TIAM	trillium	TRILL
	quaking aspen	POTR5	American basswood	TIAM
	sugar maple	ACSA3	bedstraw	GALIU
			twisted stalk	STAM2
			white ash	FRAM2
			smooth yellow violet	VIPUP2
			sedge	CAREX
			rattlesnake fern	BOVI
			yellow birch	BEAL2
			ladyfern	ATHYR
			Jack in the pulpit	ARTR
			sugar maple	ACSA3
			false Solomon's seal	SMILA
			red elderberry	SACA11
			hairy Solomon's seal	POPU4
			sweet cicely	OSCL
			spinulose woodfern	DRCA11

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
15C: Wabeno-----	American elm	ULAM	smooth yellow violet	VIPUP2
	bigtooth aspen	POGR4	downy yellow violet	VIPU3
	black cherry	PRSE2	eastern hemlock	TSCA
	eastern hemlock	TSCA	trillium	TRILL
	eastern hophornbeam	OSVI	American basswood	TIAM
	white ash	FRAM2	twisted stalk	STAM2
	yellow birch	BEAL2	false Solomon's seal	SMILA
	American basswood	TIAM	hairy Solomon's seal	POPU4
	quaking aspen	POTR5	sweet cicely	OSCL
	sugar maple	ACSA3	eastern hophornbeam	OSVI
			Canada mayflower	MACA4
			bedstraw	GALIU
			white ash	FRAM2
			spinulose woodfern	DRCA11
			rattlesnake fern	BOVI
			yellow birch	BEAL2
			ladyfern	ATHYR
			Jack in the pulpit	ARTR
			sugar maple	ACSA3
			American elm	ULAM
			Canada white violet	VICA4
			blue cohosh	CATH2
			red elderberry	SACA11
			sedge	CAREX
16A: Fence-----	American basswood	TIAM	American elm	ULAM
	bigtooth aspen	POGR4	eastern hemlock	TSCA
	black cherry	PRSE2	American basswood	TIAM
	eastern hemlock	TSCA	twisted stalk	STAM2
	quaking aspen	POTRT	red elderberry	SACA11
	red maple	ACRU	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	Canada mayflower	MACA4
	yellow birch	BEAL2	sedge	CAREX
			yellow birch	BEAL2
			ladyfern	ATHYR
			sugar maple	ACSA3
			red maple	ACRU
			spinulose woodfern	DRCA11
17B: Lode-----	balsam fir	ABBA	yellow birch	BEAL2
	bigtooth aspen	POGR4	American basswood	TIAM
	eastern hemlock	TSCA	balsam fir	ABBA
	eastern white pine	PIST	red maple	ACRU
	paper birch	BEPA	sugar maple	ACSA3
	sugar maple	ACSA3	juneberry	AMELA
	yellow birch	BEAL2	wild sarsaparilla	ARNU2
	jack pine	PIBA2	bigleaf aster	ASMA2
	northern red oak	QURU	sedge	CAREX
	quaking aspen	POTR5	beaked hazelnut	COCO6
	red maple	ACRU	spinulose woodfern	DRCA11
	red pine	PIRE	bedstraw	GALIU
	white spruce	PIGL	ground pine	LYOB
			Canada mayflower	MACA4
			white spruce	PIGL
			eastern white pine	PIST
			grasses	POA
			pin cherry	PRPE2
			choke cherry	PRVI
			brackenfern	PTERI
			northern red oak	QURU
			eastern hemlock	TSCA
			starflower	TRIEI
			northern whitecedar	THOC2

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
17C:				
Lode-----	balsam fir	ABBA	starflower	TRIEN
	bigtooth aspen	POGR4	American basswood	TIAM
	eastern hemlock	TSCA	northern whitecedar	THOC2
	eastern white pine	PIST	northern red oak	QURU
	paper birch	BEPA	brackenfern	PTERI
	sugar maple	ACSA3	choke cherry	PRVI
	yellow birch	BEAL2	pin cherry	PRPE2
	jack pine	PIBA2	grasses	POA
	northern red oak	QURU	eastern white pine	PIST
	quaking aspen	POTR5	white spruce	PIGL
	red maple	ACRU	Canada mayflower	MACA4
	red pine	PIRE	spinulose woodfern	DRCA11
	white spruce	PIGL	beaked hazelnut	COCO6
			sedge	CAREX
			yellow birch	BEAL2
			bigleaf aster	ASMA2
			wild sarsaparilla	ARNU2
			juneberry	AMELA
			sugar maple	ACSA3
			ground pine	LYOB
			balsam fir	ABBA
			bedstraw	GALIU
			eastern hemlock	TSCA
			red maple	ACRU
20B:				
Pence-----	balsam fir	ABBA	wild sarsaparilla	ARNU2
	eastern white pine	PIST	sweetfern	COPE80
	northern red oak	QURU	wintergreen	GAPR2
	paper birch	BEPA	cowwheat	MELAM2
	quaking aspen	POTRT	misc. perennial	PPGG
	red maple	ACRU	grasses	
	red pine	PIRE	brackenfern	PTERI
			starflower	TRIEN
			lowbush blueberry	VAAN
			blueberry	VACCI
			beaked hazelnut	COCO6
			bigleaf aster	ASMA2
			serviceberry	AMELA
			barren strawberry	WAFR
Lode-----	balsam fir	ABBA	beaked hazelnut	COCO6
	bigtooth aspen	POGR4	spinulose woodfern	DRCA11
	eastern hemlock	TSCA	bedstraw	GALIU
	eastern white pine	PIST	ground pine	LYOB
	paper birch	BEPA	Canada mayflower	MACA4
	sugar maple	ACSA3	northern whitecedar	THOC2
	yellow birch	BEAL2	sedge	CAREX
	jack pine	PIBA2	grasses	POA
	northern red oak	QURU	brackenfern	PTERI
	quaking aspen	POTR5	yellow birch	BEAL2
	red maple	ACRU	bigleaf aster	ASMA2
	red pine	PIRE	white spruce	PIGL
	white spruce	PIGL	wild sarsaparilla	ARNU2
			juneberry	AMELA
			sugar maple	ACSA3
			red maple	ACRU
			eastern white pine	PIST
			balsam fir	ABBA
			pin cherry	PRPE2
			American basswood	TIAM
			starflower	TRIEN
			eastern hemlock	TSCA
			choke cherry	PRVI
			northern red oak	QURU

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
20C:				
Pence-----	balsam fir	ABBA	barren strawberry	WAFR
	eastern white pine	PIST	brackenfern	PTERI
	northern red oak	QURU	starflower	TRIE
	paper birch	BEP	lowbush blueberry	VAAN
	quaking aspen	POTRT	blueberry	VACCI
	red maple	ACRU	misc. perennial	PPGG
	red pine	PIRE	grasses	
			cowheat	MELAM2
			wintergreen	GAPR2
			sweetfern	COPE80
			beaked hazelnut	COCO6
			serviceberry	AMELA
			wild sarsaparilla	ARNU2
			bigleaf aster	ASMA2
21:				
Minocqua-----	balsam fir	ABBA	blueberry	VACCI
	balsam poplar	POBA2	white spruce	PIGL
	bigtooth aspen	POGR4	brackenfern	PTERI
	black ash	FRNI	grasses	POA
	black spruce	PIMA	red maple	ACRU
	eastern hemlock	TSCA	sugar maple	ACSA3
	northern whitecedar	THOC2	yellow birch	BEAL2
	paper birch	BEP	sedge	CAREX
	quaking aspen	POTR5	yellow beadleily	CLB03
	red maple	ACRU	bunchberry dogwood	COCA13
	sugar maple	ACSA3	goldthread	COPTI
	white spruce	PIGL	woodfern	DRYOP
	yellow birch	BEAL2	eastern hemlock	TSCA
			starflower	TRB02
			northern whitecedar	THOC2
			twisted stalk	STAM2
			balsam fir	ABBA
			wood sorrel	OXMO
			Canada mayflower	MACA4
			American fly	LOCA7
			honeysuckle	
			shining clubmoss	HULU2
			wintergreen	GAPR2
Leafriver-----	black ash	FRNI	sphagnum moss	SPHAG*
	eastern hemlock	TSCA	blueberry	VACCI
	paper birch	BEP	balsam fir	ABBA
	red maple	ACRU	red maple	ACRU
	balsam fir	ABBA	speckled alder	ALINR
	black spruce	PIMA	eastern hemlock	TSCA
	northern whitecedar	THOC2	sedge	CAREX
	tamarack	LALA	yellow beadleily	CLB03
			bunchberry dogwood	COCA13
			northern whitecedar	THOC2
			starflower	TRB02
			wood sorrel	OXMO
			Canada mayflower	MACA4
			creeping snowberry	GAHI2
			spinulose woodfern	DRCA11
			goldthread	COPTI
			dewberry	RUHIS3

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
23B:				
Chabeneau-----	jack pine	PIBA2	choke cherry	PRVI
	northern red oak	QURU	pin cherry	PRPE2
	quaking aspen	POTR5	grasses	POA
	red maple	ACRU	eastern white pine	PIST
	red pine	PIRE	white spruce	PIGL
	white spruce	PIGL	Canada mayflower	MACA4
			ground pine	LYOB
			brackenfern	PTERI
			northern red oak	QURU
			northern whitecedar	THOC2
			American basswood	TIAM
			starflower	TRIE
			red maple	ACRU
			sugar maple	ACSA3
			wild sarsaparilla	ARNU2
			bigleaf aster	ASMA2
			eastern hemlock	TSCA
			balsam fir	ABBA
			juneberry	AMELA
			bedstraw	GALI
			spinulose woodfern	DRCA11
			beaked hazelnut	COCO6
			sedge	CAREX
			yellow birch	BEAL2
Karlin-----	American basswood	TIAM	spinulose shield	DRSP4
	eastern hemlock	TSCA	fern	
	northern red oak	QURU	American fly	LOCA7
	quaking aspen	POTR5	honeysuckle	
	red pine	PIRE	ground pine	LYOB
	sugar maple	ACSA3	large leaved aster	ASMA2
	yellow birch	BEAL2	goldthread	COPTI
			sedge	CAREX
			ladyfern	ATHYR
			brackenfern	PTERI
			barren strawberry	WAFR
			American starflower	TRBO2
			twisted stalk	STAM2
			Canada mayflower	MACA4
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
Pence-----	balsam fir	ABBA	eastern teaberry	GAPR2
	eastern white pine	PIST	serviceberry	AMELA
	northern red oak	QURU	sweetfern	COPE80
	paper birch	BEPA	barren strawberry	WAFR
	quaking aspen	POTR5	wild sarsaparilla	ARNU2
	red maple	ACRU	bigleaf aster	ASMA2
	red pine	PIRE	beaked hazelnut	COCO6
			cowwheat	MELAM2
			misc. perennial	PPGG
			grasses	
			brackenfern	PTERI
			starflower	TRIE
			lowbush blueberry	VAA
			blueberry	VACCI

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
26B:				
Stambaugh-----	American basswood	TIAM	brackenfern	PTERI
	balsam fir	ABBA	sweetfern	COPE80
	eastern hemlock	TSCA	American elm	ULAM
	eastern white pine	PIST	eastern hemlock	TSCA
	red maple	ACRU	sugar maple	ACSA3
	sugar maple	ACSA3		
	yellow birch	BEAL2		
27:				
Lupton-----	balsam fir	ABBA	Pennsylvania sedge	CAPE6
	black spruce	PIMA	American elm	ULAM
	jack pine	PIBA2	speckled alder	ALINR
	northern whitecedar	THOC2	willow	SALIX
	tamarack	LALA	northern whitecedar	THOC2
Tawas-----	balsam fir	ABBA	speckled alder	ALRU3
	black ash	FRNI	starflower	TRBO2
	northern whitecedar	THOC2	dewberry	RUHIS3
	red maple	ACRU	royal fern	OSRE
	tamarack	LALA	cinnamon fern	OSCI
	white spruce	PIGL	bunchberry dogwood	COCA13
			sedge	CAREX
			moss	2MOSS
28:				
Dawson-----	eastern white pine	PIST	creeping snowberry	GAHI2
	jack pine	PIBA2	leatherleaf	CHCA2
	black spruce	PIMA	blueberry	VACCI
	tamarack	LALA	sphagnum moss	SPHAG*
			bog rosemary	ANPO
			sedge	CAREX
			purple pitcherplant	SAPU4
			bog laurel	KAPO
			tamarack	LALA
			bog Labradortea	LEGR
			black spruce	PIMA
Greenwood-----	black spruce	PIMA	bog Labradortea	LEGR
	red maple	ACRU	purple pitcherplant	SAPU4
	tamarack	LALA	bog rosemary	ANPO
			small cranberry	VAOX
			velvetleaf	VAMY
			huckleberry	
			leatherleaf	CHCA2
			sphagnum moss	SPHAG*
Loxley-----	balsam fir	ABBA	blueberry	VACCI
	black spruce	PIMA	sphagnum moss	SPHAG*
	tamarack	LALA	black spruce	PIMA
	black spruce		purple pitcherplant	SAPU4
	tamarack		bog Labradortea	LEGR
			tamarack	LALA
			bog laurel	KAPO
			creeping snowberry	GAHI2
			leatherleaf	CHCA2
			sedge	CAREX
			bog rosemary	ANPO

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
29B: Pence, very deep water table-----	balsam fir eastern white pine northern red oak paper birch quaking aspen red maple red pine	ABBA PIST QURU BEPA POTRT ACRU PIRE	barren strawberry blueberry wild sarsaparilla serviceberry lowbush blueberry bigleaf aster starflower beaked hazelnut sweetfern eastern teaberry cowwheat misc. perennial grasses brackenfern	WAFR VACCI ARNU2 AMELA VAAN ASMA2 TRIEN COCO6 COPE80 GAPR2 MELAM2 PPGG PTERI
31: Evert-----	American elm balsam poplar black ash paper birch red maple silver maple	ULAM POBA2 FRNI BEPA ACRU ACSA2	mint sensitive fern grasses dewberry sedge black ash jewelweed bedstraw speckled alder raspberry common ladyfern balsam fir American elm red maple	MENTH ONSE POA RUHIS3 CAREX FRNI IMCA GALIU ALINR RUIDI ATFI ABBA ULAM ACRU
Tawas-----	balsam fir black ash northern whitecedar red maple tamarack white spruce	ABBA FRNI THOC2 ACRU LALA PIGL	dewberry sedge bunchberry dogwood cinnamon fern royal fern speckled alder starflower moss	RUHIS3 CAREX COCA13 OSCI OSRE ALRU3 TRBO2 2MOSS
32A: Net-----	balsam fir bigtooth aspen eastern hemlock paper birch quaking aspen red maple white spruce yellow birch	ABBA POGR4 TSCA BEPA POTR5 ACRU PIGL BEAL2	shining clubmoss mountain woodsorrel hairy Solomon's seal American starflower red maple Sambucus racemosa var. racemosa threeleaf goldthread balsam fir Canada beadruby bunchberry dogwood wild sarsaparilla spinulose woodfern common ladyfern yellow bluebeadlily sedge	HULU2 OXMO POPU4 TRBO2 ACRU SARAR3 COTR2 ABBA MACA4 COCA13 ARNU2 DRCA11 ATFI CLBO3 CAREX

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
35A: Beechwood-----	American basswood	TIAM	starflower	TRBO2
	American elm	ULAM	twisted stalk	STAM2
	balsam fir	ABBA	brackenfern	PTERI
	balsam poplar	POBA2	grasses	POA
	bigtooth aspen	POGR4	wood sorrel	OXMO
	black spruce	PIMA	Canada mayflower	MACA4
	eastern hemlock	TSCA	American fly	LOCA7
	northern whitecedar	THOC2	honeysuckle	
	paper birch	BEPA	shining clubmoss	HULU2
	quaking aspen	POTR5	long beech fern	THPH
	red maple	ACRU	spinulose shield	DRSP4
	sugar maple	ACSA3	fern	
	white ash	FRAM2	goldthread	COPTI
	white spruce	PIGL	bunchberry dogwood	COCA13
	yellow birch	BEAL2	yellow beadlily	CLBO3
			sedge	CAREX
36: Gay-----	American basswood	TIAM	Canada mayflower	MACA4
	balsam fir	ABBA	blueberry	VACCI
	black spruce	PIMA	starflower	TRBO2
	green ash	FRPE	twisted stalk	STAM2
	red maple	ACRU	sedge	CAREX
	tamarack	LALA	wood sorrel	OXMO
	white spruce	PIGL	grasses	POA
			brackenfern	PTERI
			American fly	LOCA7
			honeysuckle	
			yellow beadlily	CLBO3
			bunchberry dogwood	COCA13
			goldthread	COPTI
			woodfern	DRYOP
			wintergreen	GAPR2
			shining clubmoss	HULU2
Pleine-----	balsam fir	ABBA	gooseberry	RIBES
	balsam poplar	POBA2	northern dewberry	RUFL
	black ash	FRNI	American red	RUID
	northern whitecedar	THOC2	raspberry	
	paper birch	BEPA	elderberry	SAMBU
	red maple	ACRU	nightshade	SOLAN
			stinging nettle	URDI
			misc. perennial	PPGG
			grasses	
			mint	MENTH
			Canada mayflower	MACA4
			sedge	CAREX
			jewelweed	IMCA
			ladyfern	ATFI
37B: Gogebic-----	American basswood	TIAM	spinulose shield	DRSP4
	balsam fir	ABBA	fern	
	eastern hemlock	TSCA	bedstraw	GALIU
	eastern hophornbeam	OSVI	oakfern	GYDR
	northern red oak	QURU	Canada mayflower	MACA4
	northern whitecedar	THOC2	elderberry	SAMBU
	quaking aspen	POTR5	violet	VIOLA
	red maple	ACRU	bunchberry dogwood	COCA13
	red pine	PIRE	wild sarsaparilla	ARNU2
	sugar maple	ACSA3	common ladyfern	ATFI
	white spruce	PIGL	yellow beadlily	CLBO3
	yellow birch	BEAL2	sedge	CAREX
			rattlesnake fern	BOVI

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
37B:				
Tula-----	balsam fir	ABBA	spinulose shield	DRSP4
	eastern hemlock	TSCA	fern	
	eastern white pine	PIST	wintergreen	GAPR2
	quaking aspen	POTRT	oakfern	GYDR
	red maple	ACRU	shining clubmoss	HULU2
	sugar maple	ACSA3	American fly	LOCA7
			honeysuckle	
			Canada mayflower	MACA4
			goldthread	COPTI
			wild sarsaparilla	ARNU2
			sedge	CAREX
			hairy Solomon's seal	POPU4
			American starflower	TRBO2
			bunchberry dogwood	COCA13
			twisted stalk	STAM2
			wood sorrel	OXMO
			yellow beadlelily	CLBO3
Lupton-----	balsam fir	ABBA	royal fern	OSRE
	black ash	FRNI	starflower	TRBO2
	black spruce	PIMA	speckled alder	ALRU3
	eastern hemlock	TSCA	dewberry	RUHIS3
	jack pine	PIBA2	cinnamon fern	OSCI
	northern whitecedar	THOC2	bunchberry dogwood	COCA13
	red maple	ACRU	sedge	CAREX
	tamarack	LALA	sphagnum moss	SPHAG*
	white spruce	PIGL		
38B:				
Gogebic, sandy				
substratum-----	American basswood	TIAM	sedge	CAREX
	eastern hemlock	TSCA	yellow beadlelily	CLBO3
	eastern hophornbeam	OSVI	spinulose shield	DRSP4
	northern red oak	QURU	fern	
	quaking aspen	POTR5	bedstraw	GALIU
	red maple	ACRU	oakfern	GYDR
	red pine	PIRE	Canada mayflower	MACA4
	sugar maple	ACSA3	sensitive fern	ONSE
	white ash	FRAM2	sweet cicely	OSCL
	yellow birch	BEAL2	Maryland sanicle	SAMA2
			elderberry	SAMBU
			violet	VIOLA
			downy yellow violet	VIPU3
			common ladyfern	ATFI
			rattlesnake fern	BOVI
			blue cohosh	CATH2
			white baneberry	ACPA
			wild sarsaparilla	ARNU2
			Jack in the pulpit	ARTR

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
38C: Gogebic, sandy substratum-----	American basswood	TIAM	sedge	CAREX
	eastern hemlock	TSCA	blue cohosh	CATH2
	eastern hophornbeam	OSVI	yellow beadleily	CLBO3
	northern red oak	QURU	spinulose shield	DRSP4
	quaking aspen	POTR5	fern	
	red maple	ACRU	white baneberry	ACPA
	red pine	PIRE	oakfern	GYDR
	sugar maple	ACSA3	rattlesnake fern	BOVI
	white ash	FRAM2	sensitive fern	ONSE
	yellow birch	BEAL2	sweet cicely	OSCL
			Maryland sanicle	SAMA2
			elderberry	SAMBU
			violet	VIOLA
			downy yellow violet	VIPU3
			common ladyfern	ATFI
			Jack in the pulpit	ARTR
			Canada mayflower	MACA4
			wild sarsaparilla	ARNU2
			bedstraw	GALIU
38D: Gogebic, sandy substratum-----	American basswood	TIAM	sedge	CAREX
	eastern hemlock	TSCA	blue cohosh	CATH2
	eastern hophornbeam	OSVI	yellow beadleily	CLBO3
	northern red oak	QURU	rattlesnake fern	BOVI
	quaking aspen	POTR5	bedstraw	GALIU
	red maple	ACRU	oakfern	GYDR
	red pine	PIRE	Canada mayflower	MACA4
	sugar maple	ACSA3	sensitive fern	ONSE
	white ash	FRAM2	sweet cicely	OSCL
	yellow birch	BEAL2	wild sarsaparilla	ARNU2
			Maryland sanicle	SAMA2
			elderberry	SAMBU
			violet	VIOLA
			downy yellow violet	VIPU3
			spinulose shield	DRSP4
			fern	
			common ladyfern	ATFI
			Jack in the pulpit	ARTR
			white baneberry	ACPA
39B: Gogebic, sandy substratum-----	American basswood	TIAM	common ladyfern	ATFI
	eastern hemlock	TSCA	rattlesnake fern	BOVI
	eastern hophornbeam	OSVI	sedge	CAREX
	northern red oak	QURU	blue cohosh	CATH2
	quaking aspen	POTR5	yellow beadleily	CLBO3
	red maple	ACRU	spinulose shield	DRSP4
	red pine	PIRE	fern	
	sugar maple	ACSA3	bedstraw	GALIU
	white ash	FRAM2	Jack in the pulpit	ARTR
	yellow birch	BEAL2	sensitive fern	ONSE
			sweet cicely	OSCL
			Maryland sanicle	SAMA2
			elderberry	SAMBU
			violet	VIOLA
			downy yellow violet	VIPU3
			Canada mayflower	MACA4
			oakfern	GYDR
			wild sarsaparilla	ARNU2
			white baneberry	ACPA

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
39C: Gogebic, sandy substratum-----	American basswood	TIAM	rattlesnake fern	BOVI
	eastern hemlock	TSCA	sedge	CAREX
	eastern hophornbeam	OSVI	blue cohosh	CATH2
	northern red oak	QURU	yellow beادلily	CLBO3
	quaking aspen	POTR5	spinulose shield	DRSP4
	red maple	ACRU	fern	
	red pine	PIRE	bedstraw	GALIU
	sugar maple	ACSA3	oakfern	GYDR
	white ash	FRAM2	common ladyfern	ATFI
	yellow birch	BEAL2	sensitive fern	ONSE
			sweet cicely	OSCL
			Maryland sanicle	SAMA2
			elderberry	SAMBU
			violet	VIOLA
			downy yellow violet	VIPU3
			white baneberry	ACPA
			wild sarsaparilla	ARNU2
			Jack in the pulpit	ARTR
			Canada mayflower	MACA4
39D: Gogebic, sandy substratum-----	American basswood	TIAM	common ladyfern	ATFI
	eastern hemlock	TSCA	rattlesnake fern	BOVI
	eastern hophornbeam	OSVI	sedge	CAREX
	northern red oak	QURU	blue cohosh	CATH2
	quaking aspen	POTR5	yellow beادلily	CLBO3
	red maple	ACRU	spinulose shield	DRSP4
	red pine	PIRE	fern	
	sugar maple	ACSA3	oakfern	GYDR
	white ash	FRAM2	Jack in the pulpit	ARTR
	yellow birch	BEAL2	sweet cicely	OSCL
			bedstraw	GALIU
			Maryland sanicle	SAMA2
			elderberry	SAMBU
			violet	VIOLA
			downy yellow violet	VIPU3
			wild sarsaparilla	ARNU2
			Canada mayflower	MACA4
			sensitive fern	ONSE
			white baneberry	ACPA
41: Lupton-----	balsam fir	ABBA	sphagnum moss	SPHAG*
	black ash	FRNI	starflower	TRBO2
	black spruce	PIMA	bunchberry dogwood	COCA13
	eastern hemlock	TSCA	speckled alder	ALRU3
	jack pine	PIBA2	royal fern	OSRE
	northern whitecedar	THOC2	dewberry	RUHIS3
	red maple	ACRU	cinnamon fern	OSCI
	tamarack	LALA	sedge	CAREX
	white spruce	PIGL		

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
41: Pleine-----	balsam fir balsam poplar black ash northern whitecedar paper birch red maple	ABBA POBA2 FRNI THOC2 BEPA ACRU	gooseberry northern dewberry American red raspberry elderberry nightshade stinging nettle mint misc. perennial grasses Canada mayflower jewelweed sedge ladyfern	RIBES RUFL RUID SMBU SOLAN URDI MENTH PPGG MACA4 IMCA CAREX ATFI
Cathro-----	balsam fir black ash northern whitecedar paper birch red maple tamarack white spruce	ABBA FRNI THOC2 BEPA ACRU LALA PIGL	sedge rattlesnake fern northern dewberry bedstraw goldthread woodsorrel sphagnum moss naked miterwort American starflower spinulose shield fern common ladyfern	CAREX BOVI RUFL GALIU COPTI OXALI SPHAG* MINU3 TRBO2 DRSP4 ATFI
42: Ausable-----	balsam poplar black ash paper birch red maple	POBA2 FRNI BEPA ACRU	grasses dewberry raspberry sensitive fern mint common ladyfern sedge jewelweed bedstraw	POA RUHIS3 RUIDI ONSE MENTH ATFI CAREX IMCA GALIU
Tawas-----	balsam fir black ash northern whitecedar red maple tamarack white spruce	ABBA FRNI THOC2 ACRU LALA PIGL	moss sedge bunchberry dogwood cinnamon fern royal fern starflower dewberry speckled alder	2MOSS CAREX COCA13 OSCI OSRE TRBO2 RUHIS3 ALRU3
43B: Karlin-----	balsam fir black cherry eastern white pine jack pine northern red oak red maple red pine sugar maple	ABBA PRSE2 PIST PIBA2 QURU ACRU PIRE ACSA3	twisted stalk American starflower red elderberry brackenfern Canada mayflower ground pine American fly honeysuckle spinulose shield fern goldthread sedge large leaved aster hairy Solomon's seal barren strawberry	STAM2 TRBO2 SACA11 PTERI MACA4 LYOB LOCA7 DRSP4 COPTI CAREX ASMA2 POPU4 WAFR

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
43B: Pence-----	balsam fir	ABBA	cowwheat	MELAM2
	eastern white pine	PIST	misc. perennial	PPGG
	northern red oak	QURU	grasses	
	paper birch	BEPA	brackenfern	PTERI
	quaking aspen	POTRT	starflower	TRIEI
	red maple	ACRU	lowbush blueberry	VAAN
	red pine	PIRE	blueberry	VACCI
			bigleaf aster	ASMA2
			beaked hazelnut	COCO6
			sweetfern	COPE80
			wintergreen	GAPR2
			wild sarsaparilla	ARNU2
			serviceberry	AMELA
43C: Karlin-----	balsam fir	ABBA	hairy Solomon's seal	POPU4
	black cherry	PRSE2	brackenfern	PTERI
	eastern white pine	PIST	Canada mayflower	MACA4
	jack pine	PIBA2	barren strawberry	WAFR
	northern red oak	QURU	red elderberry	SACA11
	red maple	ACRU	ground pine	LYOB
	red pine	PIRE	twisted stalk	STAM2
	sugar maple	ACSA3	American starflower	TRBO2
			large leaved aster	ASMA2
			sedge	CAREX
			spinulose shield fern	DRSP4
			goldthread	COPTI
			American fly	LOCA7
			honeysuckle	
Pence-----	balsam fir	ABBA	wild sarsaparilla	ARNU2
	eastern white pine	PIST	serviceberry	AMELA
	northern red oak	QURU	beaked hazelnut	COCO6
	paper birch	BEPA	sweetfern	COPE80
	quaking aspen	POTRT	wintergreen	GAPR2
	red maple	ACRU	cowwheat	MELAM2
	red pine	PIRE	brackenfern	PTERI
			starflower	TRIEI
			bigleaf aster	ASMA2
			misc. perennial	PPGG
			grasses	
			lowbush blueberry	VAAN
			blueberry	VACCI
43D: Karlin-----	balsam fir	ABBA	ground pine	LYOB
	black cherry	PRSE2	barren strawberry	WAFR
	eastern white pine	PIST	American starflower	TRBO2
	jack pine	PIBA2	twisted stalk	STAM2
	northern red oak	QURU	red elderberry	SACA11
	red maple	ACRU	hairy Solomon's seal	POPU4
	red pine	PIRE	Canada mayflower	MACA4
	sugar maple	ACSA3	goldthread	COPTI
			American fly	LOCA7
			honeysuckle	
			brackenfern	PTERI
			spinulose shield fern	DRSP4
			sedge	CAREX
			large leaved aster	ASMA2

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
43D: Pence-----	balsam fir	ABBA	starflower	TRIE
	eastern white pine	PIST	misc. perennial	PPGG
	northern red oak	QURU	grasses	
	paper birch	BEP	cowheat	MELAM2
	quaking aspen	POTRT	wintergreen	GAPR2
	red maple	ACRU	sweetfern	COPE80
	red pine	PIRE	beaked hazelnut	COCO6
			lowbush blueberry	VAAN
			serviceberry	AMELA
			bigleaf aster	ASMA2
			wild sarsaparilla	ARNU2
			blueberry	VACCI
			brackenfern	PTERI
44B: Karlin-----	American basswood	TIAM	brackenfern	PTERI
	eastern hemlock	TSCA	twisted stalk	STAM2
	northern red oak	QURU	red elderberry	SACA11
	quaking aspen	POTR5	large leaved aster	ASMA2
	red pine	PIRE	ladyfern	ATHYR
	sugar maple	ACSA3	sedge	CAREX
	yellow birch	BEAL2	barren strawberry	WAFR
			American starflower	TRBO2
			hairy Solomon's seal	POPU4
			Canada mayflower	MACA4
			ground pine	LYOB
			American fly	LOCA7
			honeysuckle	
			spinulose shield	DRSP4
			fern	
			goldthread	COPTI
Keweenaw-----	balsam fir	ABBA	sedge	CAREX
	black cherry	PRSE2	ground pine	LYOB
	eastern hemlock	TSCA	brackenfern	PTAQ
	eastern white pine	PIST	partridgeberry	MIRE
	northern red oak	QURU	bedstraw	GALIU
	paper birch	BEP	shining clubmoss	HULU2
	quaking aspen	POTR5	Canada mayflower	MACA4
	red maple	ACRU	American starflower	TRBO2
	sugar maple	ACSA3	velvetleaf	VAMY
	yellow birch	BEAL2	huckleberry	
			wintergreen	GAPR2
			large leaved aster	ASMA2
			spinulose shield	DRSP4
			fern	
			wild sarsaparilla	ARNU2
Sarona, dense substratum	American basswood	TIAM	ladyfern	ATFI
	northern red oak	QURU	sedge	CAREX
	quaking aspen	POTR5	yellow beadlily	CLBO3
	red pine	PIRE	goldthread	COPTI
	sugar maple	ACSA3	spinulose shield	DRSP4
			fern	
			oakfern	GYDR
			American fly	LOCA7
			honeysuckle	
			Canada mayflower	MACA4
			false Solomon's seal	MAST4
			cinnamon fern	OSCI
			red elderberry	SACA11
			starflower	TRIE

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
44C:				
Karlin-----	American basswood	TIAM	barren strawberry	WAFR
	eastern hemlock	TSCA	twisted stalk	STAM2
	northern red oak	QURU	red elderberry	SACA11
	quaking aspen	POTR5	brackenfern	PTERI
	red pine	PIRE	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	Canada mayflower	MACA4
	yellow birch	BEAL2	American starflower	TRBO2
			American fly	LOCA7
			honeysuckle	
			spinulose shield	DRSP4
			fern	
			goldthread	COPTI
			sedge	CAREX
			ladyfern	ATHYR
			large leaved aster	ASMA2
			ground pine	LYOB
Keweenaw-----	balsam fir	ABBA	ground pine	LYOB
	black cherry	PRSE2	sedge	CAREX
	eastern hemlock	TSCA	spinulose shield	DRSP4
	eastern white pine	PIST	fern	
	northern red oak	QURU	bedstraw	GALIU
	paper birch	BEPA	shining clubmoss	HULU2
	quaking aspen	POTR5	wild sarsaparilla	ARNU2
	red maple	ACRU	partridgeberry	MIRE
	sugar maple	ACSA3	brackenfern	PTAQ
	yellow birch	BEAL2	American starflower	TRBO2
			velvetleaf	VAMY
			huckleberry	
			wintergreen	GAPR2
			large leaved aster	ASMA2
			Canada mayflower	MACA4
Sarona, dense substratum	American basswood	TIAM	ladyfern	ATFI
	northern red oak	QURU	sedge	CAREX
	quaking aspen	POTR5	yellow beadlelily	CLBO3
	red pine	PIRE	goldthread	COPTI
	sugar maple	ACSA3	spinulose shield	DRSP4
			fern	
			oakfern	GYDR
			American fly	LOCA7
			honeysuckle	
			Canada mayflower	MACA4
			false Solomon's seal	MAST4
			cinnamon fern	OSCI
			red elderberry	SACA11
			starflower	TRIE

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
44D:				
Karlin-----	American basswood	TIAM	large leaved aster	ASMA2
	eastern hemlock	TSCA	ladyfern	ATHYR
	northern red oak	QURU	sedge	CAREX
	quaking aspen	POTR5	goldthread	COPTI
	red pine	PIRE	spinulose shield	DRSP4
	sugar maple	ACSA3	fern	
	yellow birch	BEAL2	American fly	LOCA7
			honeysuckle	
			ground pine	LYOB
			Canada mayflower	MACA4
			hairy Solomon's seal	POPU4
			brackenfern	PTERI
			red elderberry	SACA11
			twisted stalk	STAM2
			American starflower	TRBO2
			barren strawberry	WAFR
Keweenaw-----	balsam fir	ABBA	ground pine	LYOB
	black cherry	PRSE2	sedge	CAREX
	eastern hemlock	TSCA	spinulose shield	DRSP4
	eastern white pine	PIST	fern	
	northern red oak	QURU	bedstraw	GALIU
	paper birch	BEPA	shining clubmoss	HULU2
	quaking aspen	POTR5	Canada mayflower	MACA4
	red maple	ACRU	partridgeberry	MIRE
	sugar maple	ACSA3	brackenfern	PTAQ
	yellow birch	BEAL2	American starflower	TRBO2
			velvetleaf	VAMY
			huckleberry	
			wintergreen	GAPR2
			large leaved aster	ASMA2
			wild sarsaparilla	ARNU2
Sarona, dense substratum	American basswood	TIAM	ladyfern	ATFI
	northern red oak	QURU	sedge	CAREX
	quaking aspen	POTR5	yellow beadlelily	CLBO3
	red pine	PIRE	goldthread	COPTI
	sugar maple	ACSA3	spinulose shield	DRSP4
			fern	
			oakfern	GYDR
			American fly	LOCA7
			honeysuckle	
			Canada mayflower	MACA4
			false Solomon's seal	MAST4
			cinnamon fern	OSCI
			red elderberry	SACA11
			starflower	TRIEH

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
46C:				
Amasa-----	American basswood	TIAM	downy yellow violet	VIPU3
	bigtooth aspen	POGR4	rattlesnake fern	BOVI
	black cherry	PRSE2	ladyfern	ATHYR
	eastern hemlock	TSCA	Canada white violet	VICA4
	eastern hophornbeam	OSVI	trillium	TRILL
	quaking aspen	POTR5	smooth yellow violet	VIPUP2
	sugar maple	ACSA3	sedge	CAREX
	yellow birch	BEAL2	twisted stalk	STAM2
			false Solomon's seal	SMILA
			red elderberry	SACA11
			Jack in the pulpit	ARTR
			blue cohosh	CATH2
			spinulose shield fern	DRSP4
			bedstraw	GALIU
			Canada mayflower	MACA4
			sweet cicely	OSCL
			hairy Solomon's seal	POPU4
Karlin-----	American basswood	TIAM	barren strawberry	WAFR
	eastern hemlock	TSCA	large leaved aster	ASMA2
	northern red oak	QURU	ladyfern	ATHYR
	quaking aspen	POTR5	spinulose shield fern	DRSP4
	red pine	PIRE		
	sugar maple	ACSA3	American fly	LOCA7
	yellow birch	BEAL2	honeysuckle	
			sedge	CAREX
			twisted stalk	STAM2
			red elderberry	SACA11
			brackenfern	PTERI
			Canada mayflower	MACA4
			goldthread	COPTI
			American starflower	TRBO2
			hairy Solomon's seal	POPU4
			ground pine	LYOB
46D:				
Amasa-----	American basswood	TIAM	hairy Solomon's seal	POPU4
	bigtooth aspen	POGR4	ladyfern	ATHYR
	black cherry	PRSE2	false Solomon's seal	SMILA
	eastern hemlock	TSCA	red elderberry	SACA11
	eastern hophornbeam	OSVI	sedge	CAREX
	quaking aspen	POTR5	blue cohosh	CATH2
	sugar maple	ACSA3	spinulose shield fern	DRSP4
	yellow birch	BEAL2		
			smooth yellow violet	VIPUP2
			downy yellow violet	VIPU3
			Canada white violet	VICA4
			trillium	TRILL
			twisted stalk	STAM2
			rattlesnake fern	BOVI
			Jack in the pulpit	ARTR
			sweet cicely	OSCL
			Canada mayflower	MACA4
			bedstraw	GALIU

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
46D: Karlin-----	American basswood	TIAM	goldthread	COPTI
	eastern hemlock	TSCA	Canada mayflower	MACA4
	northern red oak	QURU	ladyfern	ATHYR
	quaking aspen	POTR5	ground pine	LYOB
	red pine	PIRE	American fly	LOCA7
	sugar maple	ACSA3	honeysuckle	
	yellow birch	BEAL2	spinulose shield	DRSP4
			fern	
			sedge	CAREX
			barren strawberry	WAFR
			American starflower	TRBO2
			twisted stalk	STAM2
			red elderberry	SACA11
			brackenfern	PTERI
			large leaved aster	ASMA2
			hairy Solomon's seal	POPU4
46E: Amasa-----	American basswood	TIAM	red elderberry	SACA11
	bigtooth aspen	POGR4	sedge	CAREX
	black cherry	PRSE2	blue cohosh	CATH2
	eastern hemlock	TSCA	downy yellow violet	VIPU3
	eastern hophornbeam	OSVI	Canada white violet	VICA4
	quaking aspen	POTR5	trillium	TRILL
	sugar maple	ACSA3	twisted stalk	STAM2
	yellow birch	BEAL2	false Solomon's seal	SMILA
			smooth yellow violet	VIPUP2
			hairy Solomon's seal	POPU4
			rattlesnake fern	BOVI
			spinulose shield	DRSP4
			fern	
			bedstraw	GALIU
			Canada mayflower	MACA4
			sweet cicely	OSCL
			Jack in the pulpit	ARTR
			ladyfern	ATHYR
Karlin-----	American basswood	TIAM	red elderberry	SACA11
	eastern hemlock	TSCA	twisted stalk	STAM2
	northern red oak	QURU	American starflower	TRBO2
	quaking aspen	POTR5	barren strawberry	WAFR
	red pine	PIRE	ladyfern	ATHYR
	sugar maple	ACSA3	brackenfern	PTERI
	yellow birch	BEAL2	hairy Solomon's seal	POPU4
			Canada mayflower	MACA4
			sedge	CAREX
			ground pine	LYOB
			American fly	LOCA7
			honeysuckle	
			spinulose shield	DRSP4
			fern	
			goldthread	COPTI
			large leaved aster	ASMA2

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
46F:				
Amasa-----	American basswood	TIAM	red maple	ACRU
	bigtooth aspen	POGR4	sugar maple	ACSA3
	black cherry	PRSE2	ladyfern	ATHYR
	eastern hemlock	TSCA	yellow birch	BEAL2
	quaking aspen	POTR5	sedge	CAREX
	red maple	ACRU	spinulose woodfern	DRCA11
	sugar maple	ACSA3	Canada mayflower	MACA4
	yellow birch	BEAL2	hairy Solomon's seal	POPU4
			red elderberry	SACA11
			twisted stalk	STAM2
			American basswood	TIAM
			eastern hemlock	TSCA
			American elm	ULAM
Karlin-----	American basswood	TIAM	large leaved aster	ASMA2
	eastern hemlock	TSCA	ladyfern	ATHYR
	northern red oak	QURU	sedge	CAREX
	quaking aspen	POTR5	goldthread	COPTI
	red pine	PIRE	spinulose shield	DRSP4
	sugar maple	ACSA3	fern	
	yellow birch	BEAL2	American fly	LOCA7
			honeysuckle	
			ground pine	LYOB
			Canada mayflower	MACA4
			hairy Solomon's seal	POPU4
			brackenfern	PTERI
			red elderberry	SACA11
			twisted stalk	STAM2
			American starflower	TRBO2
			barren strawberry	WAFR
47B:				
Karlin, very deep water table-----	American basswood	TIAM	large leaved aster	ASMA2
	eastern hemlock	TSCA	ladyfern	ATHYR
	northern red oak	QURU	sedge	CAREX
	quaking aspen	POTR5	goldthread	COPTI
	red pine	PIRE	spinulose shield	DRSP4
	sugar maple	ACSA3	fern	
	yellow birch	BEAL2	American fly	LOCA7
			honeysuckle	
			ground pine	LYOB
			Canada mayflower	MACA4
			hairy Solomon's seal	POPU4
			brackenfern	PTERI
			red elderberry	SACA11
			twisted stalk	STAM2
			American starflower	TRBO2
			barren strawberry	WAFR

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
47B:				
Noseum-----	balsam fir	ABBA	wild sarsaparilla	ARNU2
	bigtooth aspen	POGR4	large leaved aster	ASMA2
	quaking aspen	POTR5	sedge	CAREX
	red maple	ACRU	beaked hazelnut	COCO6
	sugar maple	ACSA3	goldthread	COPTI
	yellow birch	BEAL2	spinulose shield fern	DRSP4
			shining clubmoss	HULU2
			ground pine	LYOB
			Canada mayflower	MACA4
			choke cherry	PRVI
			American fly honeysuckle	LOCA7
			starflower	TRBO2
			brackenfern	PTAQ
Gay-----	American basswood	TIAM	brackenfern	PTERI
	balsam fir	ABBA	grasses	POA
	black spruce	PIMA	wood sorrel	OXMO
	green ash	FRPE	Canada mayflower	MACA4
	red maple	ACRU	American fly	LOCA7
	tamarack	LALA	honeysuckle	
	white spruce	PIGL	shining clubmoss	HULU2
			twisted stalk	STAM2
			goldthread	COPTI
			bunchberry dogwood	COCA13
			yellow beadlily	CLBO3
			starflower	TRBO2
			blueberry	VACCI
			wintergreen	GAPR2
			woodfern	DRYOP
			sedge	CAREX
48C:				
Karlin-----	American basswood	TIAM	ladyfern	ATHYR
	eastern hemlock	TSCA	sedge	CAREX
	northern red oak	QURU	goldthread	COPTI
	quaking aspen	POTR5	spinulose shield fern	DRSP4
	red pine	PIRE	fern	
	sugar maple	ACSA3	American fly	LOCA7
	yellow birch	BEAL2	honeysuckle	
			ground pine	LYOB
			Canada mayflower	MACA4
			hairy Solomon's seal	POPU4
			brackenfern	PTERI
			red elderberry	SACA11
			twisted stalk	STAM2
			American starflower	TRBO2
			barren strawberry	WAFR
			large leaved aster	ASMA2

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
48C: Michigamme-----	American basswood	TIAM	ladyfern	ATHYR
	bigtooth aspen	POGR4	rattlesnake fern	BOVI
	eastern hemlock	TSCA	sedge	CAREX
	eastern hophornbeam	OSVI	blue cohosh	CATH2
	eastern white pine	PIST	spinulose shield	DRSP4
	northern red oak	QURU	fern	
	quaking aspen	POTR5	bedstraw	GALIU
	sugar maple	ACSA3	Canada mayflower	MACA4
	yellow birch	BEAL2	sweet cicely	OSCL
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			false Solomon's seal	SMILA
			twisted stalk	STAM2
			trillium	TRILL
			Canada white violet	VICA4
			downy yellow violet	VIPU3
			smooth yellow violet	VIPUP2
			Jack in the pulpit	ARTR
48F: Karlin-----	American basswood	TIAM	red maple	ACRU
	northern red oak	QURU	sugar maple	ACSA3
	quaking aspen	POTR5	ladyfern	ATHYR
	red pine	PIRE	yellow birch	BEAL2
	sugar maple	ACSA3	sedge	CAREX
			spinulose woodfern	DRCA11
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			Canada mayflower	MACA4
			American basswood	TIAM
			eastern hemlock	TSCA
			American elm	ULAM
			twisted stalk	STAM2
Michigamme-----	American elm	ULAM	Jack in the pulpit	ARTR
	bigtooth aspen	POGR4	ladyfern	ATHYR
	black cherry	PRSE2	sugar maple	ACSA3
	eastern hemlock	TSCA	rattlesnake fern	BOVI
	eastern hophornbeam	OSVI	sedge	CAREX
	white ash	FRAM2	blue cohosh	CATH2
	yellow birch	BEAL2	spinulose woodfern	DRCA11
	American basswood	TIAM	white ash	FRAM2
	quaking aspen	POTR5	bedstraw	GALIU
	sugar maple	ACSA3	Canada mayflower	MACA4
			eastern hophornbeam	OSVI
			sweet cicely	OSCL
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			false Solomon's seal	SMILA
			twisted stalk	STAM2
			American basswood	TIAM
			trillium	TRILL
			eastern hemlock	TSCA
			American elm	ULAM
			Canada white violet	VICA4
			downy yellow violet	VIPU3
			smooth yellow violet	VIPUP2
			yellow birch	BEAL2

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
49B:				
Pelissier-----	jack pine	PIBA2	Virginia strawberry	FRVI
	northern red oak	QURU	juneberry	AMELA
	quaking aspen	POTR5	brackenfern	PTAQ
	red maple	ACRU	large leaved aster	ASMA2
	red pine	PIRE	sedge	CAREX
	white spruce	PIGL	beaked hazelnut	COCO6
			wintergreen	GAPR2
			grasses	POA
			eastern hemlock	TSCA
			blueberry	VACCI
			wild sarsaparilla	ARNU2
			starflower	TRBO2
			Canada mayflower	MACA4
Sarwet-----	bigtooth aspen	POGR4	yellow birch	BEAL2
	black cherry	PRSE2	American elm	ULAM
	eastern hemlock	TSCA	sugar maple	ACSA3
	red maple	ACRU	red maple	ACRU
	yellow birch	BEAL2	sedge	CAREX
	American basswood	TIAM	spinulose woodfern	DRCA11
	quaking aspen	POTR5	Canada mayflower	MACA4
	sugar maple	ACSA3	ladyfern	ATHYR
			eastern hemlock	TSCA
			American basswood	TIAM
			twisted stalk	STAM2
			red elderberry	SACA11
			hairy Solomon's seal	POPU4
49C:				
Pelissier-----	jack pine	PIBA2	beaked hazelnut	COCO6
	northern red oak	QURU	sedge	CAREX
	quaking aspen	POTR5	large leaved aster	ASMA2
	red maple	ACRU	wild sarsaparilla	ARNU2
	red pine	PIRE	juneberry	AMELA
	white spruce	PIGL	Virginia strawberry	FRVI
			wintergreen	GAPR2
			Canada mayflower	MACA4
			wild lily of the valley	VACCI
			blueberry	POA
			grasses	TRBO2
			starflower	TSCA
			eastern hemlock	PTAQ
			brackenfern	
Sarwet-----	bigtooth aspen	POGR4	sugar maple	ACSA3
	black cherry	PRSE2	American basswood	TIAM
	eastern hemlock	TSCA	American elm	ULAM
	red maple	ACRU	eastern hemlock	TSCA
	yellow birch	BEAL2	twisted stalk	STAM2
	American basswood	TIAM	red elderberry	SACA11
	quaking aspen	POTR5	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	Canada mayflower	MACA4
			spinulose woodfern	DRCA11
			red maple	ACRU
			sedge	CAREX
			ladyfern	ATHYR
			yellow birch	BEAL2

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
49D: Pelissier-----	jack pine	PIBA2	beaked hazelnut	COCO6
	northern red oak	QURU	blueberry	VACCI
	quaking aspen	POTR5	Canada mayflower	MACA4
	red maple	ACRU	brackenfern	PTERI
	red pine	PIRE	barren strawberry	WAFR
			serviceberry	AMELA
			starflower	TRBO2
			grasses	POA
			wintergreen	GAPR2
			sedge	CAREX
			large leaved aster	ASMA2
			wild sarsaparilla	ARNU2
52B: Pence-----	balsam fir	ABBA	eastern teaberry	GAPR2
	eastern white pine	PIST	cowwheat	MELAM2
	northern red oak	QURU	misc. perennial	PPGG
	paper birch	BEPA	grasses	
	quaking aspen	POTRT	barren strawberry	WAFR
	red maple	ACRU	blueberry	VACCI
	red pine	PIRE	serviceberry	AMELA
			sweetfern	COPE80
			beaked hazelnut	COCO6
			bigleaf aster	ASMA2
			wild sarsaparilla	ARNU2
			starflower	TRIEU
			lowbush blueberry	VAAN
			brackenfern	PTERI
Vilas-----	American basswood	TIAM	wood anemone	ANQU
	eastern hophornbeam	OSVI	wild sarsaparilla	ARNU2
	eastern white pine	PIST	large leaved aster	ASMA2
	northern red oak	QURU	beaked hazelnut	COCO6
	paper birch	BEPA	wintergreen	GAPR2
	quaking aspen	POTR5	grasses	POA
	red maple	ACRU	brackenfern	PTERI
	red pine	PIRE	starflower	TRBO2
	sugar maple	ACSA3	lowbush blueberry	VAAN
	white ash	FRAM2	blueberry	VACCI
			juneberry	AMELA
52C: Pence-----	balsam fir	ABBA	starflower	TRIEU
	eastern white pine	PIST	brackenfern	PTERI
	northern red oak	QURU	misc. perennial	PPGG
	paper birch	BEPA	grasses	
	quaking aspen	POTRT	bigleaf aster	ASMA2
	red maple	ACRU	wild sarsaparilla	ARNU2
	red pine	PIRE	serviceberry	AMELA
			barren strawberry	WAFR
			sweetfern	COPE80
			beaked hazelnut	COCO6
			eastern teaberry	GAPR2
			cowwheat	MELAM2
			lowbush blueberry	VAAN
			blueberry	VACCI

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
52C: Vilas-----	American basswood	TIAM	blueberry	VACCI
	eastern hophornbeam	OSVI	lowbush blueberry	VAAN
	eastern white pine	PIST	starflower	TRBO2
	northern red oak	QURU	brackenfern	PTERI
	paper birch	BEPA	wood anemone	ANQU
	quaking aspen	POTR5	juneberry	AMELA
	red maple	ACRU	grasses	POA
	red pine	PIRE	wintergreen	GAPR2
	sugar maple	ACSA3	beaked hazelnut	COCO6
	white ash	FRAM2	large leaved aster	ASMA2
			wild sarsaparilla	ARNU2
53B: Manitowish-----	eastern hemlock	TSCA	bunchberry dogwood	COCA13
	eastern white pine	PIST	twisted stalk	STAM2
	quaking aspen	POTR5	brackenfern	PTAQ
	red maple	ACRU	velvetleaf	VAMY
	red pine	PIRE	huckleberry	
	sugar maple	ACSA3	hairy Solomon's seal	POPU4
			Canada mayflower	MACA4
			bigleaf aster	ASMA2
Croswell-----	jack pine	PIBA2	starflower	TRBO2
	northern red oak	QURU	brackenfern	PTERI
	quaking aspen	POTR5	Canada mayflower	MACA4
	red maple	ACRU	wintergreen	GAPR2
	red pine	PIRE	beaked hazelnut	COCO6
	white spruce	PIGL	sedge	CAREX
			juneberry	AMELA
			wild sarsaparilla	ARNU2
			grasses	POA
			large leaved aster	ASMA2
			blueberry	VACCI
57B: Karlin-----	jack pine	PIBA2	eastern white pine	PIST
	northern red oak	QURU	brackenfern	PTERI
	quaking aspen	POTR5	northern red oak	QURU
	red maple	ACRU	blueberry	VACCI
	red pine	PIRE	eastern hemlock	TSCA
	white spruce	PIGL	starflower	TRBO2
			grasses	POA
			Canada mayflower	MACA4
			white spruce	PIGL
			wintergreen	GAPR2
			beaked hazelnut	COCO6
			sedge	CAREX
			large leaved aster	ASMA2
			wild sarsaparilla	ARNU2
			juneberry	AMELA
			sugar maple	ACSA3
			red maple	ACRU
Manitowish-----	eastern hemlock	TSCA	velvetleaf	VAMY
	eastern white pine	PIST	huckleberry	
	quaking aspen	POTR5	bigleaf aster	ASMA2
	red maple	ACRU	bunchberry dogwood	COCA13
	red pine	PIRE	twisted stalk	STAM2
	sugar maple	ACSA3	brackenfern	PTAQ
			hairy Solomon's seal	POPU4
			Canada mayflower	MACA4

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
57C:				
Karlin-----	jack pine	PIBA2	wild sarsaparilla	ARNU2
	northern red oak	QURU	juneberry	AMELA
	quaking aspen	POTR5	sugar maple	ACSA3
	red maple	ACRU	red maple	ACRU
	red pine	PIRE	sedge	CAREX
	white spruce	PIGL	large leaved aster	ASMA2
			beaked hazelnut	COCO6
			wintergreen	GAPR2
			Canada mayflower	MACA4
			white spruce	PIGL
			eastern white pine	PIST
			grasses	POA
			brackenfern	PTERI
			northern red oak	QURU
			starflower	TRBO2
			blueberry	VACCI
			eastern hemlock	TSCA
Manitowish-----	eastern hemlock	TSCA	velvetleaf	VAMY
	eastern white pine	PIST	huckleberry	
	quaking aspen	POTR5	bigleaf aster	ASMA2
	red maple	ACRU	Canada mayflower	MACA4
	red pine	PIRE	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	brackenfern	PTAQ
			twisted stalk	STAM2
			bunchberry dogwood	COCA13
58B:				
Vilas, very deep water table-----	balsam fir	ABBA	wild sarsaparilla	ARNU2
	eastern white pine	PIST	wood anemone	ANQU
	northern red oak	QURU	large leaved aster	ASMA2
	paper birch	BEPA	beaked hazelnut	COCO6
	quaking aspen	POTR5	wintergreen	GAPR2
	red maple	ACRU	grasses	POA
	red pine	PIRE	brackenfern	PTERI
	sugar maple	ACSA3	starflower	TRBO2
			lowbush blueberry	VAAN
			blueberry	VACCI
			juneberry	AMELA
Croswell-----	jack pine	PIBA2	blueberry	VACCI
	northern red oak	QURU	wintergreen	GAPR2
	quaking aspen	POTR5	juneberry	AMELA
	red maple	ACRU	starflower	TRBO2
	red pine	PIRE	brackenfern	PTERI
	white spruce	PIGL	grasses	POA
			Canada mayflower	MACA4
			beaked hazelnut	COCO6
			sedge	CAREX
			large leaved aster	ASMA2
			wild sarsaparilla	ARNU2

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Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
58B: Pence, very deep water table-----	balsam fir eastern white pine northern red oak paper birch quaking aspen red maple red pine	ABBA PIST QURU BEPA POTRT ACRU PIRE	wild sarsaparilla serviceberry bigleaf aster beaked hazelnut sweetfern eastern teaberry cowheat brackenfern starflower lowbush blueberry blueberry barren strawberry misc. perennial grasses	ARNU2 AMELA ASMA2 COCO6 COPE80 GAPR2 MELAM2 PTERI TRIEI VAAN VACCI WAFR PPGG
61: Tawas-----	balsam fir black ash northern whitecedar red maple tamarack white spruce	ABBA FRNI THOC2 ACRU LALA PIGL	moss sedge bunchberry dogwood cinnamon fern royal fern dewberry starflower speckled alder	2MOSS CAREX COCA13 OSCI OSRE RUHIS3 TRBO2 ALRU3
Kinross-----	balsam fir black spruce eastern white pine jack pine paper birch quaking aspen red maple tamarack	ABBA PIMA PIST PIBA2 BEPA POTR5 ACRU LALA	Canada mayflower sphagnum moss starflower lowbush blueberry velvetleaf huckleberry cinnamon fern sedge yellow beadlily bunchberry dogwood stiff clubmoss wintergreen creeping snowberry coptis	MACA4 SPHAG* TRBO2 VAAN VAMY OSCI CAREX CLBO3 COCA13 LYAN2 GAPR2 GAHI2 COPTI
62B: Pelkie-----	American basswood American elm red maple sugar maple white spruce yellow birch	TIAM ULAM ACRU ACSA3 PIGL BEAL2	twisted stalk common ladyfern violet sedge hairy Solomon's seal sweet cicely Canada mayflower spinulose shield fern American starflower	STAM2 ATFI VIOLA CAREX POPU4 OSCL MACA4 DRSP4 TRBO2
83: Bowstring-----	balsam poplar black ash paper birch red maple silver maple	POBA2 FRNI BEPA ACRU ACSA2	sensitive fern grasses mint jewelweed bedstraw sedge common ladyfern dewberry raspberry	ONSE POA MENTH IMCA GALIUI CAREX ATFI RUHIS3 RUIDI

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Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
141D: Oldman-----	American basswood	TIAM	yellow beadlily	CLB03
	eastern hemlock	TSCA	sedge	CAREX
	green ash	FRPE	sweet cicely	OSCL
	northern red oak	QURU	wild sarsaparilla	ARNU2
	quaking aspen	POTR5	American fly	LOCA7
	sugar maple	ACSA3	honeysuckle	
	yellow birch	BEAL2	rattlesnake fern	BOVI
			Canada mayflower	MACA4
			partridgeberry	MIRE
			downy yellow violet	VIPU3
			large leaved aster	ASMA2
			spinulose shield fern	DRSP4
			trout lily	ERAM5
			twistedstalk	STREP3
			American starflower	TRBO2
			violet	VIOLA
			thimbleberry	RUPA
141E: Oldman-----	American basswood	TIAM	downy yellow violet	VIPU3
	eastern hemlock	TSCA	partridgeberry	MIRE
	green ash	FRPE	American fly	LOCA7
	northern red oak	QURU	honeysuckle	
	quaking aspen	POTR5	Canada mayflower	MACA4
	sugar maple	ACSA3	twistedstalk	STREP3
	yellow birch	BEAL2	yellow beadlily	CLB03
			thimbleberry	RUPA
			trout lily	ERAM5
			spinulose shield fern	DRSP4
			large leaved aster	ASMA2
			American starflower	TRBO2
			rattlesnake fern	BOVI
			violet	VIOLA
			wild sarsaparilla	ARNU2
			sweet cicely	OSCL
			sedge	CAREX
141F: Porkies-----	American basswood	TIAM	white baneberry	ACPA
	bigtooth aspen	POGR4	violet	VIOLA
	eastern hemlock	TSCA	elderberry	SAMBU
	eastern white pine	PIST	spinulose shield	DRSP4
	green ash	FRPE	fern	
	quaking aspen	POTR5	sweet cicely	OSCL
	sugar maple	ACSA3	sedge	CAREX
			twistedstalk	STREP3
			blue cohosh	CATH2
			shining clubmoss	HULU2
			long beech fern	THPH
			hairy Solomon's seal	POPU4
			oakfern	GYDR

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
214B: Amnicon-----	balsam fir	ABBA	violet	VIOLA
	eastern white pine	PIST	starflower	TRBO2
	paper birch	BEPA	brackenfern	PTERI
	quaking aspen	POTR5	Canada mayflower	MACA4
	red maple	ACRU	American fly	LOCA7
	red pine	PIRE	honeysuckle	
	white spruce	PIGL	spinulose shield fern	DRSP4
			redosier dogwood	COST4
			beaked hazelnut	COCO6
			bunchberry dogwood	COCA13
			yellow beadleily	CLBO3
			large leaved aster	ASMA2
			wild sarsaparilla	ARNU2
Bergland-----	balsam fir	ABBA	redosier dogwood	COST4
	black ash	FRNI	spotted joepeyeweed	EUMAM
	northern whitecedar	THOC2	speckled alder	ALINR
	paper birch	BEPA	horsetail	EQUIS
	quaking aspen	POTR5	large leaved aster	ASMA2
	red maple	ACRU	marsh marigold	CALTH
	tamarack	LALA	sedge	CAREX
	white spruce	PIGL	willow	SALIX
			yarrow	ACHIL
216B: Amnicon-----	balsam fir	ABBA	wild sarsaparilla	ARNU2
	eastern white pine	PIST	large leaved aster	ASMA2
	paper birch	BEPA	yellow beadleily	CLBO3
	quaking aspen	POTR5	bunchberry dogwood	COCA13
	red maple	ACRU	beaked hazelnut	COCO6
	red pine	PIRE	redosier dogwood	COST4
	white spruce	PIGL	spinulose shield fern	DRSP4
			American fly	LOCA7
			honeysuckle	
			Canada mayflower	MACA4
			brackenfern	PTERI
			starflower	TRBO2
			violet	VIOLA
217A: Cuttre-----	balsam fir	ABBA	speckled alder	ALINR
	green ash	FRPE	large leaved aster	ASMA2
	northern whitecedar	THOC2	sedge	CAREX
	paper birch	BEPA	ladyfern	ATFI
	quaking aspen	POTR5	spinulose shield	DRSP4
	red maple	ACRU	fern	
	sugar maple	ACSA3	brackenfern	PTERI
	white spruce	PIGL	field horsetail	EQAR
	yellow birch	BEAL2		
218: Bergland-----	balsam fir	ABBA	redosier dogwood	COST4
	black ash	FRNI	sedge	CAREX
	northern whitecedar	THOC2	marsh marigold	CALTH
	paper birch	BEPA	willow	SALIX
	quaking aspen	POTR5	horsetail	EQUIS
	red maple	ACRU	speckled alder	ALINR
	tamarack	LALA	spotted joepeyeweed	EUMAM
	white spruce	PIGL	large leaved aster	ASMA2
			yarrow	ACHIL

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Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
219B:				
Payseor-----	balsam fir	ABBA	brackenfern	PTERI
	green ash	FRPE	speckled alder	ALINR
	northern whitecedar	THOC2	field horsetail	EQAR
	paper birch	BEPa	sedge	CAREX
	quaking aspen	POTR5	large leaved aster	ASMA2
	red maple	ACRU	ladyfern	ATFI
	sugar maple	ACSA3	bedstraw	GALIU
	white spruce	PIGL	blueberry	VACCI
	yellow birch	BEAL2	bloodroot	SACA13
Froberg-----	balsam fir	ABBA	Canada mayflower	MACA4
	eastern hemlock	TSCA	hepatica	HEPAT
	quaking aspen	POTR5	partridgeberry	MIRE
	red maple	ACRU	sedge	CAREX
	sugar maple	ACSA3	large leaved aster	ASMA2
	white spruce	PIGL	wild sarsaparilla	ARNU2
	yellow birch	BEAL2	brackenfern	PTERI
			barren strawberry	WAFR
			beaked hazelnut	COCO6
222:				
Matchwood-----	American basswood	TIAM	sedge	CAREX
	balsam fir	ABBA	speckled alder	ALINR
	black ash	FRNI	horsetail	EQUIS
	northern whitecedar	THOC2	grasses	POA
	paper birch	BEPa		
	quaking aspen	POTR5		
	red maple	ACRU		
	tamarack	LALA		
	white spruce	PIGL		
225A:				
Cuttre-----	balsam fir	ABBA	spinulose shield	DRSP4
	green ash	FRPE	fern	
	northern whitecedar	THOC2	field horsetail	EQAR
	paper birch	BEPa	sedge	CAREX
	quaking aspen	POTR5	ladyfern	ATFI
	red maple	ACRU	large leaved aster	ASMA2
	sugar maple	ACSA3	speckled alder	ALINR
	white spruce	PIGL	redosier dogwood	COSES
	yellow birch	BEAL2	brackenfern	PTERI
Bergland-----	balsam fir	ABBA	willow	SALIX
	black ash	FRNI	sedge	CAREX
	northern whitecedar	THOC2	redosier dogwood	COST4
	paper birch	BEPa	spotted joeypyeweed	EUMAM
	quaking aspen	POTR5	marsh marigold	CALTH
	red maple	ACRU	large leaved aster	ASMA2
	tamarack	LALA	horsetail	EQUIS
	white spruce	PIGL	speckled alder	ALINR
			yarrow	ACHIL
226B:				
Froberg-----	balsam fir	ABBA	hepatica	HEPAT
	eastern hemlock	TSCA	Canada mayflower	MACA4
	quaking aspen	POTR5	brackenfern	PTERI
	red maple	ACRU	beaked hazelnut	COCO6
	sugar maple	ACSA3	barren strawberry	WAFR
	white spruce	PIGL	sedge	CAREX
	yellow birch	BEAL2	partridgeberry	MIRE
			wild sarsaparilla	ARNU2
			large leaved aster	ASMA2

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
230B:				
Moquah-----	basswood	TILIA	meadow-rue	THALI2
	eastern white pine	PIST	blue cohosh	CATH2
	green ash	FRPE	partridgeberry	MIRE
	quaking aspen	POTR5	violet	VIOLA
	red maple	ACRU	baneberry	ACTAE
	slippery elm	ULRU	interrupted fern	OSCL2
	sugar maple	ACSA3	sedge	CAREX
	white spruce	PIGL	redosier dogwood	COST4
			field horsetail	EQAR
			ladyfern	ATFI
			speckled alder	ALINR
			choke cherry	PRVI
			ostrich fern	MAST
			strawberry	FRAGA
Arnheim-----	balsam fir	ABBA	horsetail	EQUIS
	black ash	FRNI	common ladyfern	ATFI
	green ash	FRPE	mint	MENTH
	northern whitecedar	THOC2	naked miterwort	MINU3
	paper birch	BEPA	sensitive fern	ONSE
	quaking aspen	POTR5	speckled alder	ALINR
	red maple	ACRU	nettle	URTIC
	tamarack	LALA	ostrich fern	MAST
	white spruce	PIGL	cinnamon fern	OSCI
	yellow birch	BEAL2	sphagnum moss	SPHAG*
			jewelweed	IMCA
			redosier dogwood	COST4
			sedge	CAREX
231:				
Matchwood-----	American basswood	TIAM	speckled alder	ALINR
	balsam fir	ABBA	sedge	CAREX
	black ash	FRNI	grasses	POA
	northern whitecedar	THOC2		
	paper birch	BEPA		
	quaking aspen	POTR5		
	red maple	ACRU		
	tamarack	LALA		
	white spruce	PIGL		
Dorval-----	balsam fir	ABBA	sedge	CAREX
	black spruce	PIMA	ladyfern	ATFI
	northern whitecedar	THOC2	Jack in the pulpit	ARTR
	paper birch	BEPA	spinulose shield	DRSP4
	red maple	ACRU	fern	
	tamarack	LALA	dewberry	RUHIS3
	white spruce	PIGL	gooseberry	RIBES
			small enchanter's	CIAL
			nightshade	
			sphagnum moss	SPHAG*
			Canada mayflower	MACA4
			water horsetail	EQFL
233:				
Schaat Creek-----	American basswood	TIAM	speckled alder	ALINR
	balsam fir	ABBA	grasses	POA
	black ash	FRNI		
	northern whitecedar	THOC2		
	paper birch	BEPA		
	quaking aspen	POTR5		
	red maple	ACRU		
	tamarack	LALA		
	white spruce	PIGL		

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
239D:				
Miskoaki-----	eastern white pine	PIST	beaked hazelnut	COCO6
	paper birch	BEPA	starflower	TRBO2
	quaking aspen	POTR5	brackenfern	PTERI
	red maple	ACRU	yellow beadlelily	CLBO3
	red pine	PIRE	bunchberry dogwood	COCA13
	sugar maple	ACSA3	large leaved aster	ASMA2
	white spruce	PIGL	wild sarsaparilla	ARNU2
			spinulose shield fern	DRSP4
			American fly	LOCA7
			honeysuckle	
			Canada mayflower	MACA4
277B:				
Kellogg, sandy substratum-----	American basswood	TIAM	yellow beadlelily	CLBO3
	bigtooth aspen	POGR4	dewberry	RUHIS3
	eastern hemlock	TSCA	twisted stalk	STAM2
	eastern white pine	PIST	thimbleberry	RUPA
	green ash	FRPE	partridgeberry	MIRE
	northern red oak	QURU	hepatica	HEPAT
	red maple	ACRU	barren strawberry	WAFR
	red pine	PIRE	honeysuckle	LONIC
	sugar maple	ACSA3	ground pine	LYOB
			cinnamon fern	OSCI
			ladyfern	ATFI
			Canada mayflower	MACA4
			brackenfern	PTAQ
Allendale-----	balsam fir	ABBA	starflower	TRBO2
	eastern white pine	PIST	Canada mayflower	MACA4
	paper birch	BEPA	dewberry	RUHIS3
	quaking aspen	POTR5	ladyfern	ATFI
	red maple	ACRU	wild sarsaparilla	ARNU2
	white ash	FRAM2	spinulose shield fern	DRSP4
	white spruce	PIGL		
			brackenfern	PTAQ
			ground pine	LYOB
			shining clubmoss	HULU2
			sedge	CAREX
			beaked hazelnut	COCO6
			wood sorrel	OXMO
			goldthread	COPTI
			partridgeberry	MIRE
280B:				
Flintsteel-----	American basswood	TIAM	hairy Solomon's seal	POPU4
	balsam fir	ABBA	false Solomon's seal	SMILA
	basswood	TILIA	downy yellow violet	VIPU3
	eastern hemlock	TSCA	sedge	CAREX
	eastern hophornbeam	OSVI	American fly	LOCA7
	green ash	FRPE	honeysuckle	
	northern whitecedar	THOC2	dutchman's breeches	DICU
	quaking aspen	POTR5	yellow beadlelily	CLBO3
	red maple	ACRU	violet	VIOLA
	sugar maple	ACSA3	trillium	TRILL
	white ash	FRAM2	wild leek	ALTR3
	yellow birch	BEAL2	Canada mayflower	MACA4
			spinulose shield fern	DRSP4

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
280C:				
Flintsteel-----	American basswood	TIAM	false Solomon's seal	SMILA
	balsam fir	ABBA	American fly	LOCA7
	basswood	TILIA	honeysuckle	
	eastern hemlock	TSCA	dutchman's breeches	DICU
	eastern hophornbeam	OSVI	yellow beadlily	CLBO3
	green ash	FRPE	violet	VIOLA
	northern whitecedar	THOC2	trillium	TRILL
	quaking aspen	POTRT	wild leek	ALTR3
	red maple	ACRU	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	spinulose shield	DRSP4
	white ash	FRAM2	fern	
	yellow birch	BEAL2	sedge	CAREX
			Canada mayflower	MACA4
			downy yellow violet	VIPU3
282B:				
Big Iron-----	American basswood	TIAM	wild sarsaparilla	ARNU2
	eastern hemlock	TSCA	partridgeberry	MIRE
	eastern hophornbeam	OSVI	ladyfern	ATFI
	green ash	FRPE	sedge	CAREX
	quaking aspen	POTR5	bunchberry dogwood	COCA13
	red maple	ACRU	naked miterwort	MINU3
	sugar maple	ACSA3	sweet coltsfoot	PEPA31
	yellow birch	BEAL2	goldthread	COPTI
			Canada mayflower	MACA4
			brackenfern	PTERI
			beaked hazelnut	COCO6
Flintsteel-----	American basswood	TIAM	spinulose shield	DRSP4
	balsam fir	ABBA	fern	
	basswood	TILIA	hairy Solomon's seal	POPU4
	eastern hemlock	TSCA	American fly	LOCA7
	eastern hophornbeam	OSVI	honeysuckle	
	green ash	FRPE	dutchman's breeches	DICU
	northern whitecedar	THOC2	yellow beadlily	CLBO3
	quaking aspen	POTRT	violet	VIOLA
	red maple	ACRU	false Solomon's seal	SMILA
	sugar maple	ACSA3	sedge	CAREX
	white ash	FRAM2	downy yellow violet	VIPU3
	yellow birch	BEAL2	Canada mayflower	MACA4
			wild leek	ALTR3
			trillium	TRILL
283B:				
Loggerhead-----	American basswood	TIAM	sedge	CAREX
	balsam fir	ABBA	goldthread	COPTI
	eastern hemlock	TSCA	spinulose shield	DRSP4
	green ash	FRPE	fern	
	quaking aspen	POTR5	shining clubmoss	HULU2
	red maple	ACRU	American fly	LOCA7
	sugar maple	ACSA3	honeysuckle	
	yellow birch	BEAL2	violet	VIOLA

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
283B:				
Noseum-----	balsam fir	ABBA	wild sarsaparilla	ARNU2
	bigtooth aspen	POGR4	large leaved aster	ASMA2
	quaking aspen	POTR5	sedge	CAREX
	red maple	ACRU	beaked hazelnut	COCO6
	sugar maple	ACSA3	goldthread	COPTI
	yellow birch	BEAL2	spinulose shield fern	DRSP4
			shining clubmoss	HULU2
			American fly	LOCA7
			honeysuckle	
			brackenfern	PTAQ
			ground pine	LYOB
			Canada mayflower	MACA4
			choke cherry	PRVI
			starflower	TRBO2
Ubly-----	American basswood	TIAM	Canada mayflower	MACA4
	hemlock	TSUGA	starflower	TRIEN
	red maple	ACRU	spinulose shield	DRSP4
	sugar maple	ACSA3	fern	
	yellow birch	BEAL2	wild sarsaparilla	ARNU2
			hairy Solomon's seal	POPU4
			sedge	CAREX
			American fly	LOCA7
			honeysuckle	
			violet	VIOLA
283C:				
Loggerhead-----	American basswood	TIAM	American fly	LOCA7
	balsam fir	ABBA	honeysuckle	
	eastern hemlock	TSUGA	violet	VIOLA
	green ash	FRPE	spinulose shield	DRSP4
	quaking aspen	POTR5	fern	
	red maple	ACRU	sedge	CAREX
	sugar maple	ACSA3	shining clubmoss	HULU2
	yellow birch	BEAL2	goldthread	COPTI
Noseum-----	balsam fir	ABBA	goldthread	COPTI
	bigtooth aspen	POGR4	sedge	CAREX
	quaking aspen	POTR5	shining clubmoss	HULU2
	red maple	ACRU	wild sarsaparilla	ARNU2
	sugar maple	ACSA3	large leaved aster	ASMA2
	yellow birch	BEAL2	beaked hazelnut	COCO6
			starflower	TRBO2
			spinulose shield	DRSP4
			fern	
			brackenfern	PTAQ
			American fly	LOCA7
			honeysuckle	
			ground pine	LYOB
			Canada mayflower	MACA4
			choke cherry	PRVI
Ubly-----	American basswood	TIAM	sedge	CAREX
	hemlock	TSUGA	Canada mayflower	MACA4
	red maple	ACRU	violet	VIOLA
	sugar maple	ACSA3	starflower	TRIEN
	yellow birch	BEAL2	American fly	LOCA7
			honeysuckle	
			spinulose shield	DRSP4
			fern	
			wild sarsaparilla	ARNU2
			hairy Solomon's seal	POPU4

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
284:				
Aquents-----	---	---	cattail	TYPHA
			cottongrass	ERIOP
			canarygrass	PHALA2
			bulrush	SCIRP
			sedge	CAREX
Gull Point-----	balsam fir	ABBA	ostrich fern	MAST
	black ash	FRNI	redosier dogwood	COST4
	black spruce	PIMA	sedge	CAREX
	green ash	FRPE	blue cohosh	CATH2
	quaking aspen	POTRT	mint	MENTH
			jewelweed	IMCA
			cinnamon fern	OSCI
			marsh marigold	CALTH
285F:				
Rockland-----	balsam fir	ABBA	spinulose shield	DRSP4
	eastern hemlock	TSCA	fern	
	eastern white pine	PIST	yellow beadleily	CLBO3
	green ash	FRPE	American starflower	TRBO2
	quaking aspen	POTR5	white baneberry	ACPA
	sugar maple	ACSA3	long beech fern	THPH
	white spruce	PIGL	ladyfern	ATFI
			American fly	LOCA7
			honeysuckle	
			twisted stalk	STAM2
			trillium	TRILL
			large leaved aster	ASMA2
			sedge	CAREX
			horsetail	EQUIS
			partridgeberry	MIRE
			wild sarsaparilla	ARNU2
Arnheim-----	balsam fir	ABBA	jewelweed	IMCA
	black ash	FRNI	horsetail	EQUIS
	green ash	FRPE	sensitive fern	ONSE
	northern whitecedar	THOC2	ostrich fern	MAST
	paper birch	BEPA	mint	MENTH
	quaking aspen	POTR5	nettle	URTIC
	red maple	ACRU	common ladyfern	ATFI
	tamarack	LALA	naked miterwort	MINU3
	white spruce	PIGL	redosier dogwood	COST4
	yellow birch	BEAL2	sedge	CAREX
			cinnamon fern	OSCI
			speckled alder	ALINR
			sphagnum moss	SPHAG*
286A:				
Big Iron-----	American basswood	TIAM	goldthread	COPTI
	black ash	FRNI	beaked hazelnut	COCO6
	eastern hemlock	TSCA	brackenfern	PTERI
	eastern hophornbeam	OSVI	wild sarsaparilla	ARNU2
	green ash	FRPE	partridgeberry	MIRE
	quaking aspen	POTR5	ladyfern	ATFI
	red maple	ACRU	sweet coltsfoot	PEPA31
	sugar maple	ACSA3	naked miterwort	MINU3
	white ash	FRAM2	bunchberry dogwood	COCA13
	yellow birch	BEAL2	sedge	CAREX
			Canada mayflower	MACA4

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
286A: Belding-----	balsam fir	ABBA	spinulose shield	DRSP4
	northern red oak	QURU	fern	
	paper birch	BEPA	sedge	CAREX
	quaking aspen	POTR5	yellow beadlelily	CLBO3
	red pine	PIRE	starflower	TRBO2
	sugar maple	ACSA3	bunchberry dogwood	COCA13
	yellow birch	BEAL2	Canada mayflower	MACA4
			goldthread	COPTI
			woodsorrel	OXALI
287: Trap Falls-----	American basswood	TIAM	small enchanter's	CIAL
	balsam fir	ABBA	nightshade	
	black ash	FRNI	trillium	TRILL
	green ash	FRPE	white baneberry	ACPA
	northern whitecedar	THOC2	jewelweed	IMCA
	paper birch	BEPA	sweet coltsfoot	PEPA31
	quaking aspen	POTR5	bunchberry dogwood	COCA13
	red maple	ACRU	sedge	CAREX
	speckled alder	ALINR	ladyfern	ATFI
	white spruce	PIGL	wild sarsaparilla	ARNU2
	yellow birch	BEAL2	partridgeberry	MIRE
			goldthread	COPTI
			Canada mayflower	MACA4
			naked miterwort	MINU3
Tonkey-----	American basswood	TIAM	brackenfern	PTAQ
	balsam fir	ABBA	cinnamon fern	OSCI
	northern whitecedar	THOC2	horsetail	EQUIS
	quaking aspen	POTR5	jewelweed	IMCA
	red maple	ACRU	ladyfern	ATFI
			sedge	CAREX
289B: Amasa-----	American basswood	TIAM	Jack in the pulpit	ARTR
	bigtooth aspen	POGR4	ladyfern	ATHYR
	black cherry	PRSE2	rattlesnake fern	BOVI
	eastern hemlock	TSCA	sedge	CAREX
	eastern hophornbeam	OSVI	blue cohosh	CATH2
	quaking aspen	POTR5	spinulose shield	DRSP4
	sugar maple	ACSA3	fern	
	yellow birch	BEAL2	bedstraw	GALIU
			Canada mayflower	MACA4
			sweet cicely	OSCL
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			false Solomon's seal	SMILA
			twisted stalk	STAM2
			trillium	TRILL
			Canada white violet	VICA4
			downy yellow violet	VIPU3
			smooth yellow violet	VIPUP2

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
290B:				
Flintsteel-----	American basswood	TIAM	hairy Solomon's seal	POPU4
	balsam fir	ABBA	false Solomon's seal	SMILA
	basswood	TILIA	spinulose shield	DRSP4
	eastern hemlock	TSCA	fern	
	eastern hophornbeam	OSVI	sedge	CAREX
	green ash	FRPE	American fly	LOCA7
	northern whitecedar	THOC2	honeysuckle	
	quaking aspen	POTRT	dutchman's breeches	DICU
	red maple	ACRU	yellow beadleily	CLBO3
	sugar maple	ACSA3	violet	VIOLA
	white ash	FRAM2	trillium	TRILL
	yellow birch	BEAL2	wild leek	ALTR3
			downy yellow violet	VIPU3
			Canada mayflower	MACA4
290C:				
Flintsteel-----	American basswood	TIAM	yellow beadleily	CLBO3
	balsam fir	ABBA	American fly	LOCA7
	basswood	TILIA	honeysuckle	
	eastern hemlock	TSCA	hairy Solomon's seal	POPU4
	eastern hophornbeam	OSVI	false Solomon's seal	SMILA
	green ash	FRPE	spinulose shield	DRSP4
	northern whitecedar	THOC2	fern	
	quaking aspen	POTRT	sedge	CAREX
	red maple	ACRU	dutchman's breeches	DICU
	sugar maple	ACSA3	violet	VIOLA
	white ash	FRAM2	trillium	TRILL
	yellow birch	BEAL2	wild leek	ALTR3
			downy yellow violet	VIPU3
			Canada mayflower	MACA4
291B:				
Kalkaska-----	bigtooth aspen	POGR4	spinulose shield	DRSP4
	eastern white pine	PIST	fern	
	northern red oak	QURU	twisted stalk	STAM2
	paper birch	BEPA	hairy Solomon's seal	POPU4
	quaking aspen	POTR5	sedge	CAREX
	red maple	ACRU	Canada mayflower	MACA4
	red pine	PIRE	elderberry	SAMBU
	sugar maple	ACSA3	starflower	TRBO2
291D:				
Kalkaska-----	bigtooth aspen	POGR4	Canada mayflower	MACA4
	eastern white pine	PIST	spinulose shield	DRSP4
	northern red oak	QURU	fern	
	paper birch	BEPA	starflower	TRBO2
	quaking aspen	POTR5	elderberry	SAMBU
	red maple	ACRU	sedge	CAREX
	red pine	PIRE	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	twisted stalk	STAM2
292B:				
Manido-----	balsam fir	ABBA	wild sarsaparilla	ARNU2
	eastern hemlock	TSCA	yellow beadleily	CLBO3
	red maple	ACRU	spinulose shield	DRSP4
	sugar maple	ACSA3	fern	
	white spruce	PIGL	Canada mayflower	MACA4
	yellow birch	BEAL2	brackenfern	PTERI
			raspberry	RUIDI
			starflower	TRBO2
			bunchberry dogwood	COCA13

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
292B: Richter-----	American basswood	TIAM	twisted stalk	STAM2
	bigtooth aspen	POGR4	long beech fern	THPH
	black ash	FRNI	violet	VIOLA
	eastern hemlock	TSCA	hairy Solomon's seal	POPU4
	eastern hophornbeam	OSVI	sensitive fern	ONSE
	eastern white pine	PIST	starflower	TRBO2
	northern whitecedar	THOC2	naked miterwort	MINU3
	quaking aspen	POTR5	yellow beedlily	CLBO3
	red maple	ACRU	wild sarsaparilla	ARNU2
	sugar maple	ACSA3	sedge	CAREX
	white spruce	PIGL	ladyfern	ATFI
	yellow birch	BEAL2	American fly	LOCA7
			honeysuckle	
			Canada mayflower	MACA4
			partridgeberry	MIRE
			oakfern	GYDR
			wild leek	ALTR3
293A: Wainola-----	balsam fir	ABBA	bunchberry dogwood	COCA13
	bigtooth aspen	POGR4	sedge	CAREX
	eastern hemlock	TSCA	velvetleaf	VAMY
	eastern white pine	PIST	huckleberry	
	jack pine	PIBA2	lowbush blueberry	VAAN
	northern whitecedar	THOC2	sphagnum moss	SPHAG*
	paper birch	BEP4	brackenfern	PTAQ
	quaking aspen	POTR5	cinnamon fern	OSCI
	red maple	ACRU	partridgeberry	MIRE
	yellow birch	BEAL2	beaked hazelnut	COCO6
			goldthread	COPTI
			spinulose shield	DRSP4
			fern	
			wintergreen	GAPR2
			clubmoss	LYCOP2
			Canada mayflower	MACA4
Trap Falls-----	American basswood	TIAM	Canada mayflower	MACA4
	balsam fir	ABBA	naked miterwort	MINU3
	black ash	FRNI	partridgeberry	MIRE
	green ash	FRPE	sweet coltsfoot	PEPA31
	northern whitecedar	THOC2	trillium	TRILL
	paper birch	BEP4	ladyfern	ATFI
	quaking aspen	POTR5	jewelweed	IMCA
	red maple	ACRU	black ash	FRNI
	speckled alder	ALINR	goldthread	COPTI
	white spruce	PIGL	sedge	CAREX
	yellow birch	BEAL2	bunchberry dogwood	COCA13
			small enchanter's	CTAL
			nightshade	
			white baneberry	ACPA
			wild sarsaparilla	ARNU2
296B: Manido-----	balsam fir	ABBA	bunchberry dogwood	COCA13
	eastern hemlock	TSCA	spinulose shield	DRSP4
	red maple	ACRU	fern	
	sugar maple	ACSA3	starflower	TRBO2
	white spruce	PIGL	raspberry	RUIDI
	yellow birch	BEAL2	brackenfern	PTERI
			Canada mayflower	MACA4
			yellow beedlily	CLBO3
			wild sarsaparilla	ARNU2

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
296B:				
Fence-----	American basswood	TIAM	sugar maple	ACSA3
	bigtooth aspen	POGR4	ladyfern	ATHYR
	black cherry	PRSE2	yellow birch	BEAL2
	eastern hemlock	TSCA	red maple	ACRU
	quaking aspen	POTRT	spinulose woodfern	DRCA11
	red maple	ACRU	Canada mayflower	MACA4
	sugar maple	ACSA3	hairy Solomon's seal	POPU4
	yellow birch	BEAL2	red elderberry	SACA11
			twisted stalk	STAM2
			American basswood	TIAM
			eastern hemlock	TSCA
			American elm	ULAM
			sedge	CAREX
Gogebic, sandy substratum-----	American basswood	TIAM	Canada mayflower	MACA4
	eastern hemlock	TSCA	yellow beadlelily	CLBO3
	eastern hophornbeam	OSVI	common ladyfern	ATFI
	northern red oak	QURU	downy yellow violet	VIPU3
	quaking aspen	POTR5	violet	VIOLA
	red maple	ACRU	elderberry	SAMBU
	red pine	PIRE	white baneberry	ACPA
	sugar maple	ACSA3	wild sarsaparilla	ARNU2
	white ash	FRAM2	Jack in the pulpit	ARTR
	yellow birch	BEAL2	rattlesnake fern	BOVI
			sedge	CAREX
			blue cohosh	CATH2
			spinulose shield fern	DRSP4
			bedstraw	GALIU
			oakfern	GYDR
			sensitive fern	ONSE
			sweet cicely	OSCL
			Maryland sanicle	SAMA2
296D:				
Manido-----	balsam fir	ABBA	raspberry	RUIDI
	eastern hemlock	TSCA	brackenfern	PTERI
	red maple	ACRU	Canada mayflower	MACA4
	sugar maple	ACSA3	yellow beadlelily	CLBO3
	white spruce	PIGL	spinulose shield fern	DRSP4
	yellow birch	BEAL2	starflower	TRBO2
			bunchberry dogwood	COCA13
			wild sarsaparilla	ARNU2
Sporley-----	bigtooth aspen	POGR4	ladyfern	ATFI
	northern red oak	QURU	violet	VIOLA
	red maple	ACRU	sweet cicely	OSCL
	sugar maple	ACSA3	red baneberry	ACRU2
	yellow birch	BEAL2	beaked hazelnut	COCO6
			mapleleaf viburnum	VIAC
			bedstraw	GALIU
			Canada mayflower	MACA4
			hawkweed	HIERA
			American starflower	TRBO2
			twisted stalk	STAM2

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
296D: Gogebic, sandy substratum-----	American basswood	TIAM	white baneberry	ACPA
	eastern hemlock	TSCA	wild sarsaparilla	ARNU2
	eastern hophornbeam	OSVI	Jack in the pulpit	ARTR
	northern red oak	QURU	common ladyfern	ATFI
	quaking aspen	POTR5	downy yellow violet	VIPU3
	red maple	ACRU	spinulose shield	DRSP4
	red pine	PIRE	fern	
	sugar maple	ACSA3	elderberry	SAMBU
	white ash	FRAM2	violet	VIOLA
	yellow birch	BEAL2	rattlesnake fern	BOVI
			sedge	CAREX
			blue cohosh	CATH2
			yellow beadlelily	CLBO3
			bedstraw	GALIUI
			oakfern	GYDR
			Canada mayflower	MACA4
			sensitive fern	ONSE
			sweet cicely	OSCL
			Maryland sanicle	SAMA2
299B: Zandi-----	American basswood	TIAM	twisted stalk	STAM2
	eastern white pine	PIST	ladyfern	ATFI
	northern red oak	QURU	Canada mayflower	MACA4
	red maple	ACRU	moss	2MOSS
	red pine	PIRE	wild sarsaparilla	ARNU2
	sugar maple	ACSA3		
	yellow birch	BEAL2		
Amasa-----	American basswood	TIAM	bedstraw	GALIUI
	American elm	ULAM	Canada mayflower	MACA4
	bigtooth aspen	POGR4	eastern hophornbeam	OSVI
	black cherry	PRSE2	sweet cicely	OSCL
	eastern hemlock	TSCA	hairy Solomon's seal	POPU4
	eastern hophornbeam	OSVI	red elderberry	SACA11
	quaking aspen	POTR5	false Solomon's seal	SMILA
	sugar maple	ACSA3	twisted stalk	STAM2
	white ash	FRAM2	American basswood	TIAM
	yellow birch	BEAL2	eastern hemlock	TSCA
			American elm	ULAM
			Canada white violet	VICA4
			downy yellow violet	VIPU3
			trillium	TRILL
			smooth yellow violet	VIPUP2
			sugar maple	ACSA3
			ladyfern	ATHYR
			yellow birch	BEAL2
			rattlesnake fern	BOVI
			sedge	CAREX
			blue cohosh	CATH2
			spinulose woodfern	DRCA11
			white ash	FRAM2
			Jack in the pulpit	ARTR

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
299B:				
Flintsteel-----	American basswood	TIAM	hairy Solomon's seal	POPU4
	balsam fir	ABBA	sedge	CAREX
	basswood	TILIA	Canada mayflower	MACA4
	eastern hemlock	TSCA	downy yellow violet	VIPU3
	eastern hophornbeam	OSVI	wild leek	ALTR3
	green ash	FRPE	trillium	TRILL
	northern whitecedar	THOC2	violet	VIOLA
	quaking aspen	POTRT	yellow beadleily	CLBO3
	red maple	ACRU	dutchman's breeches	DICU
	sugar maple	ACSA3	American fly	LOCA7
	white ash	FRAM2	honeysuckle	
	yellow birch	BEAL2	spinulose shield	DRSP4
			fern	
			false Solomon's seal	SMILA
299C:				
Zandi-----	American basswood	TIAM	moss	2MOSS
	eastern white pine	PIST	ladyfern	ATFI
	northern red oak	QURU	twisted stalk	STAM2
	red maple	ACRU	Canada mayflower	MACA4
	red pine	PIRE	wild sarsaparilla	ARNU2
	sugar maple	ACSA3		
	yellow birch	BEAL2		
Amasa-----	American basswood	TIAM	hairy Solomon's seal	POPU4
	American elm	ULAM	sweet cicely	OSCL
	bigtooth aspen	POGR4	yellow birch	BEAL2
	black cherry	PRSE2	rattlesnake fern	BOVI
	eastern hemlock	TSCA	sedge	CAREX
	eastern hophornbeam	OSVI	blue cohosh	CATH2
	quaking aspen	POTR5	spinulose woodfern	DRCA11
	sugar maple	ACSA3	white ash	FRAM2
	white ash	FRAM2	bedstraw	GALIU
	yellow birch	BEAL2	Canada mayflower	MACA4
			sugar maple	ACSA3
			Jack in the pulpit	ARTR
			red elderberry	SACA11
			smooth yellow violet	VIPUP2
			false Solomon's seal	SMILA
			Canada white violet	VICA4
			trillium	TRILL
			American elm	ULAM
			eastern hophornbeam	OSVI
			eastern hemlock	TSCA
			twisted stalk	STAM2
			American basswood	TIAM
			downy yellow violet	VIPU3
			ladyfern	ATHYR
Flintsteel-----	American basswood	TIAM	Canada mayflower	MACA4
	balsam fir	ABBA	downy yellow violet	VIPU3
	basswood	TILIA	wild leek	ALTR3
	eastern hemlock	TSCA	trillium	TRILL
	eastern hophornbeam	OSVI	yellow beadleily	CLBO3
	green ash	FRPE	dutchman's breeches	DICU
	northern whitecedar	THOC2	American fly	LOCA7
	quaking aspen	POTRT	honeysuckle	
	red maple	ACRU	sedge	CAREX
	sugar maple	ACSA3	spinulose shield	DRSP4
	white ash	FRAM2	fern	
	yellow birch	BEAL2	false Solomon's seal	SMILA
			hairy Solomon's seal	POPU4
			violet	VIOLA

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
301A: Moodig-----	American elm	ULAM	trillium	TRILL
	bigtooth aspen	POGR4	eastern hemlock	TSCA
	black cherry	PRSE2	American elm	ULAM
	eastern hophornbeam	OSVI	Canada white violet	VICA4
	eastern hophornbeam	FRAM2	downy yellow violet	VIPU3
	white ash	BEAL2	smooth yellow violet	VIPUP2
	yellow birch	TIAM	American basswood	TIAM
	American basswood	POTR5	twisted stalk	STAM2
	quaking aspen	ACSA3	false Solomon's seal	SMILA
	sugar maple		red elderberry	SACA11
			hairy Solomon's seal	POPU4
			sweet cicely	OSCL
			eastern hophornbeam	OSVI
			Canada mayflower	MACA4
			jewelweed	IMCA
			bedstraw	GALIUI
			white ash	FRAM2
			spinulose woodfern	DRCA11
			small enchanter's	CIAL
			nightshade	
			blue cohosh	CATH2
			sedge	CAREX
			rattlesnake fern	BOVI
			yellow birch	BEAL2
			ladyfern	ATHYR
			Jack in the pulpit	ARTR
			sugar maple	ACSA3
302B: Manitowish-----	eastern hemlock	TSCA	bigleaf aster	ASMA2
	eastern white pine	PIST	Canada mayflower	MACA4
	quaking aspen	POTR5	hairy Solomon's seal	POPU4
	red maple	ACRU	brackenfern	PTAQ
	red pine	PIRE	twisted stalk	STAM2
	sugar maple	ACSA3	bunchberry dogwood	COCA13
			velvetleaf	VAMY
			huckleberry	
302C: Manitowish-----	eastern hemlock	TSCA	bigleaf aster	ASMA2
	eastern white pine	PIST	hairy Solomon's seal	POPU4
	quaking aspen	POTR5	brackenfern	PTAQ
	red maple	ACRU	twisted stalk	STAM2
	red pine	PIRE	bunchberry dogwood	COCA13
	sugar maple	ACSA3	velvetleaf	VAMY
			huckleberry	
			Canada mayflower	MACA4
303: Bowstring-----	American elm	ULAM	red maple	ACRU
	balsam poplar	POBA2	speckled alder	ALINR
	black ash	FRNI	common ladyfern	ATFI
	paper birch	BEPA	sedge	CAREX
	red maple	ACRU	black ash	FRNI
	silver maple	ACSA2	bedstraw	GALIUI
			jewelweed	IMCA
			mint	MENTH
			balsam fir	ABBA
			grasses	POA
			dewberry	RUHIS3
			raspberry	RUIDI
			American elm	ULAM
			sensitive fern	ONSE

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
303: Arnheim-----	balsam fir	ABBA	sensitive fern	ONSE
	black ash	FRNI	ostrich fern	MAST
	green ash	FRPE	naked miterwort	MINU3
	northern whitecedar	THOC2	redosier dogwood	COST4
	paper birch	BEPA	sedge	CAREX
	quaking aspen	POTR5	cinnamon fern	OSCI
	red maple	ACRU	speckled alder	ALINR
	tamarack	LALA	sphagnum moss	SPHAG*
	white spruce	PIGL	common ladyfern	ATFI
	yellow birch	BEAL2	nettle	URTIC
			mint	MENTH
			jewelweed	IMCA
			horsetail	EQUIS
305B: Keweenaw-----	balsam fir	ABBA	sedge	CAREX
	black cherry	PRSE2	spinulose shield	DRSP4
	eastern hemlock	TSCA	fern	
	eastern white pine	PIST	bedstraw	GALIU
	northern red oak	QURU	shining clubmoss	HULU2
	paper birch	BEPA	Canada mayflower	MACA4
	quaking aspen	POTR5	partridgeberry	MIRE
	red maple	ACRU	wild sarsaparilla	ARNU2
	sugar maple	ACSA3	large leaved aster	ASMA2
	yellow birch	BEAL2	wintergreen	GAPR2
			velvetleaf	VAMY
			huckleberry	
			American starflower	TRBO2
			ground pine	LYOB
			brackenfern	PTAQ
Siskiwit-----	balsam fir	ABBA	American fly	LOCA7
	basswood	TILIA	honeysuckle	
	hemlock	TSUGA	blueberry	VACCI
	northern red oak	QURU	brackenfern	PTAQ
	red maple	ACRU	bunchberry dogwood	COCA13
	sugar maple	ACSA3	goldthread	COPTI
			ground pine	LYOB
			large leaved aster	ASMA2
			partridgeberry	MIRE
			yellow beadlily	CLBO3
			wintergreen	PYROL
			wild sarsaparilla	ARNU2
			Canada mayflower	MACA4
			white baneberry	ACPA
			stiff clubmoss	LYAN2
			starflower	TRBO2
			sedge	CAREX
			red elderberry	SACA11

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
305C:				
Keweenaw-----	balsam fir	ABBA	wild sarsaparilla	ARNU2
	black cherry	PRSE2	bedstraw	GALIU
	eastern hemlock	TSCA	spinulose shield	DRSP4
	eastern white pine	PIST	fern	
	northern red oak	QURU	large leaved aster	ASMA2
	paper birch	BEPA	wintergreen	GAPR2
	quaking aspen	POTR5	ground pine	LYOB
	red maple	ACRU	sedge	CAREX
	sugar maple	ACSA3	shining clubmoss	HULU2
	yellow birch	BEAL2	Canada mayflower	MACA4
			partridgeberry	MIRE
			brackenfern	PTAQ
			American starflower	TRBO2
			velvetleaf	VAMY
			huckleberry	
Siskiwit-----	balsam fir	ABBA	wild sarsaparilla	ARNU2
	basswood	TILIA	wintergreen	PYROL
	hemlock	TSUGA	yellow beadlily	CLBO3
	northern red oak	QURU	stiff clubmoss	LYAN2
	red maple	ACRU	Canada mayflower	MACA4
	sugar maple	ACSA3	white baneberry	ACPA
			starflower	TRBO2
			sedge	CAREX
			red elderberry	SACA11
			large leaved aster	ASMA2
			bunchberry dogwood	COCA13
			partridgeberry	MIRE
			ground pine	LYOB
			goldthread	COPTI
			American fly	LOCA7
			honeysuckle	
			brackenfern	PTAQ
			blueberry	VACCI
307:				
Lupton-----	balsam fir	ABBA	speckled alder	ALRU3
	black ash	FRNI	cinnamon fern	OSCI
	black spruce	PIMA	sedge	CAREX
	eastern hemlock	TSCA	sphagnum moss	SPHAG*
	jack pine	PIBA2	bunchberry dogwood	COCA13
	northern whitecedar	THOC2	starflower	TRBO2
	red maple	ACRU	dewberry	RUHIS3
	tamarack	LALA	royal fern	OSRE
	white spruce	PIGL		
Cathro-----	balsam fir	ABBA	northern dewberry	RUFL
	black ash	FRNI	spinulose shield	DRSP4
	northern whitecedar	THOC2	fern	
	paper birch	BEPA	sedge	CAREX
	red maple	ACRU	American starflower	TRBO2
	tamarack	LALA	rattlesnake fern	BOVI
	white spruce	PIGL	goldthread	COPTI
			common ladyfern	ATFI
			naked miterwort	MINU3
			sphagnum moss	SPHAG*
			woodsorrel	OXALI
			bedstraw	GALIU

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
309: Cathro-----	balsam fir	ABBA	northern dewberry	RUFL
	black ash	FRNI	spinulose shield	DRSP4
	northern whitecedar	THOC2	fern	
	paper birch	BEPA	sedge	CAREX
	red maple	ACRU	American starflower	TRBO2
	tamarack	LALA	bedstraw	GALIU
	white spruce	PIGL	sphagnum moss	SPHAG*
			naked miterwort	MINU3
			common ladyfern	ATFI
			rattlesnake fern	BOVI
			woodsorrel	OXALI
			goldthread	COPTI
310B: Gogebic-----	American basswood	TIAM	spinulose shield	DRSP4
	eastern hemlock	TSCA	fern	
	eastern hophornbeam	OSVI	elderberry	SAMBU
	northern red oak	QURU	Maryland sanicle	SAMA2
	quaking aspen	POTR5	wild sarsaparilla	ARNU2
	red maple	ACRU	sensitive fern	ONSE
	red pine	PIRE	rattlesnake fern	BOVI
	sugar maple	ACSA3	sedge	CAREX
	white ash	FRAM2	blue cohosh	CATH2
	yellow birch	BEAL2	sweet cicely	OSCL
			violet	VIOLA
			yellow beadlelily	CLBO3
			white baneberry	ACPA
			common ladyfern	ATFI
			oakfern	GYDR
			Jack in the pulpit	ARTR
			downy yellow violet	VIPU3
			Canada mayflower	MACA4
			bedstraw	GALIU
310C: Gogebic-----	American basswood	TIAM	Canada mayflower	MACA4
	eastern hemlock	TSCA	bedstraw	GALIU
	eastern hophornbeam	OSVI	Jack in the pulpit	ARTR
	northern red oak	QURU	rattlesnake fern	BOVI
	quaking aspen	POTR5	sedge	CAREX
	red maple	ACRU	blue cohosh	CATH2
	red pine	PIRE	spinulose shield	DRSP4
	sugar maple	ACSA3	fern	
	white ash	FRAM2	common ladyfern	ATFI
	yellow birch	BEAL2	sweet cicely	OSCL
			violet	VIOLA
			yellow beadlelily	CLBO3
			white baneberry	ACPA
			Maryland sanicle	SAMA2
			wild sarsaparilla	ARNU2
			downy yellow violet	VIPU3
			elderberry	SAMBU
			oakfern	GYDR
			sensitive fern	ONSE

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
310D: Gogebic-----	American basswood	TIAM	bedstraw	GALIU
	eastern hemlock	TSCA	blue cohosh	CATH2
	eastern hophornbeam	OSVI	sedge	CAREX
	northern red oak	QURU	rattlesnake fern	BOVI
	quaking aspen	POTR5	Jack in the pulpit	ARTR
	red maple	ACRU	sweet cicely	OSCL
	red pine	PIRE	violet	VIOLA
	sugar maple	ACSA3	yellow beadlelily	CLB03
	white ash	FRAM2	white baneberry	ACPA
	yellow birch	BEAL2	Maryland sanicle	SAMA2
			wild sarsaparilla	ARNU2
			downy yellow violet	VIPU3
			sensitive fern	ONSE
			common ladyfern	ATFI
			oakfern	GYDR
			spinulose shield fern	DRSP4
			elderberry	SAMBU
			Canada mayflower	MACA4
310E: Schweitzer-----	American basswood	TIAM	sedge	CAREX
	balsam fir	ABBA	starflower	TRIEU
	eastern hemlock	TSCA	twisted stalk	STAM2
	eastern hophornbeam	OSVI	elderberry	SAMBU
	eastern white pine	PIST	hairy Solomon's seal	POPU4
	northern red oak	QURU	Canada mayflower	MACA4
	quaking aspen	POTR5	spinulose shield	DRSP4
	red maple	ACRU	fern	
	sugar maple	ACSA3	downy yellow violet	VIPU3
311B: Tula-----	balsam fir	ABBA	wintergreen	GAPR2
	eastern hemlock	TSCA	Canada mayflower	MACA4
	eastern white pine	PIST	spinulose shield	DRSP4
	quaking aspen	POTR5	fern	
	red maple	ACRU	twisted stalk	STAM2
	sugar maple	ACSA3	hairy Solomon's seal	POPU4
			sedge	CAREX
			yellow beadlelily	CLB03
			bunchberry dogwood	COCA13
			goldthread	COPTI
			oakfern	GYDR
			shining clubmoss	HULU2
			American fly	LOCA7
			honeysuckle	
			American starflower	TRBO2
			wood sorrel	OXMO
			wild sarsaparilla	ARNU2

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
311B: Gogebic-----	American basswood	TIAM	violet	VIOLA
	eastern hemlock	TSCA	sweet cicely	OSCL
	eastern hophornbeam	OSVI	yellow beadlily	CLBO3
	northern red oak	QURU	Jack in the pulpit	ARTR
	quaking aspen	POTR5	rattlesnake fern	BOVI
	red maple	ACRU	bedstraw	GALIU
	red pine	PIRE	spinulose shield	DRSP4
	sugar maple	ACSA3	fern	
	white ash	FRAM2	elderberry	SAMBU
	yellow birch	BEAL2	Canada mayflower	MACA4
			oakfern	GYDR
			common ladyfern	ATFI
			sensitive fern	ONSE
			downy yellow violet	VIPU3
			wild sarsaparilla	ARNU2
			Maryland sanicle	SAMA2
			white baneberry	ACPA
			sedge	CAREX
			blue cohosh	CATH2
312A: Tula-----	balsam fir	ABBA	Canada mayflower	MACA4
	eastern hemlock	TSCA	wood sorrel	OXMO
	eastern white pine	PIST	bunchberry dogwood	COCA13
	quaking aspen	POTRT	goldthread	COPTI
	red maple	ACRU	spinulose shield	DRSP4
	sugar maple	ACSA3	fern	
			American starflower	TRBO2
			twisted stalk	STAM2
			hairy Solomon's seal	POPU4
			sedge	CAREX
			yellow beadlily	CLBO3
			wintergreen	GAPR2
			oakfern	GYDR
			shining clubmoss	HULU2
			American fly	LOCA7
			honeysuckle	
			wild sarsaparilla	ARNU2
Foxpaw-----	balsam poplar	POBA2	dewberry	RUHIS3
	bigtooth aspen	POGR4	raspberry	RUIDI
	black ash	FRNI	elderberry	SAMBU
	green ash	FRPE	small enchanter's	CIAL
	quaking aspen	POTR5	nightshade	
	red maple	ACRU	spinulose shield	DRSP4
	sugar maple	ACSA3	fern	
			gooseberry	RIBES
			common ladyfern	ATFI
			grasses	POA
			mint	MENTH
			jewelweed	IMCA
			Canada mayflower	MACA4
			sedge	CAREX
			Jack in the pulpit	ARTR

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
312A:				
Gay-----	American basswood	TIAM	Canada mayflower	MACA4
	balsam fir	ABBA	American fly	LOCA7
	black spruce	PIMA	honeysuckle	
	green ash	FRPE	shining clubmoss	HULU2
	red maple	ACRU	wintergreen	GAPR2
	tamarack	LALA	spinulose shield	DRSP4
	white spruce	PIGL	fern	
			bunchberry dogwood	COCA13
			yellow beادلily	CLBO3
			sedge	CAREX
			wood sorrel	OXMO
			grasses	POA
			brackenfern	PTERI
			twisted stalk	STAM2
			starflower	TRBO2
			blueberry	VACCI
			goldthread	COPTI
316:				
Gay-----	American basswood	TIAM	sedge	CAREX
	balsam fir	ABBA	yellow beادلily	CLBO3
	black spruce	PIMA	bunchberry dogwood	COCA13
	green ash	FRPE	spinulose shield	DRSP4
	red maple	ACRU	fern	
	tamarack	LALA	wintergreen	GAPR2
	white spruce	PIGL	shining clubmoss	HULU2
			American fly	LOCA7
			honeysuckle	
			Canada mayflower	MACA4
			wood sorrel	OXMO
			grasses	POA
			brackenfern	PTERI
			twisted stalk	STAM2
			starflower	TRBO2
			blueberry	VACCI
			goldthread	COPTI
317B:				
Gogebic-----	American basswood	TIAM	rattlesnake fern	BOVI
	eastern hemlock	TSCA	sedge	CAREX
	eastern hophornbeam	OSVI	blue cohosh	CATH2
	green ash	FRPE	bedstraw	GALIU
	northern red oak	QURU	Canada mayflower	MACA4
	quaking aspen	POTR5	elderberry	SAMBU
	red maple	ACRU	spinulose shield	DRSP4
	red pine	PIRE	fern	
	sugar maple	ACSA3	oakfern	GYDR
	yellow birch	BEAL2	common ladyfern	ATFI
			sensitive fern	ONSE
			downy yellow violet	VIPU3
			wild sarsaparilla	ARNU2
			Maryland sanicle	SAMA2
			white baneberry	ACPA
			yellow beادلily	CLBO3
			violet	VIOLA
			sweet cicely	OSCL
			Jack in the pulpit	ARTR

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
317C: Gogebic-----	American basswood	TIAM	sedge	CAREX
	eastern hemlock	TSCA	blue cohosh	CATH2
	eastern hophornbeam	OSVI	bedstraw	GALIU
	green ash	FRPE	Canada mayflower	MACA4
	northern red oak	QURU	elderberry	SAMBU
	quaking aspen	POTR5	spinulose shield fern	DRSP4
	red maple	ACRU		
	red pine	PIRE	oakfern	GYDR
	sugar maple	ACSA3	common ladyfern	ATFI
	yellow birch	BEAL2	sensitive fern	ONSE
			downy yellow violet	VIPU3
			wild sarsaparilla	ARNU2
			Maryland sanicle	SAMA2
			white baneberry	ACPA
			yellow beadleily	CLBO3
			violet	VIOLA
			sweet cicely	OSCL
			Jack in the pulpit	ARTR
			rattlesnake fern	BOVI
317D: Gogebic-----	American basswood	TIAM	white baneberry	ACPA
	eastern hemlock	TSCA	wild sarsaparilla	ARNU2
	eastern hophornbeam	OSVI	Jack in the pulpit	ARTR
	green ash	FRPE	common ladyfern	ATFI
	northern red oak	QURU	rattlesnake fern	BOVI
	quaking aspen	POTR5	sedge	CAREX
	red maple	ACRU	blue cohosh	CATH2
	red pine	PIRE	yellow beadleily	CLBO3
	sugar maple	ACSA3	spinulose shield fern	DRSP4
	yellow birch	BEAL2		
			bedstraw	GALIU
			oakfern	GYDR
			Canada mayflower	MACA4
			sensitive fern	ONSE
			sweet cicely	OSCL
			Maryland sanicle	SAMA2
			elderberry	SAMBU
			violet	VIOLA
			downy yellow violet	VIPU3
319B: McMillan-----	American basswood	TIAM	ladyfern	ATFI
	bigtooth aspen	POGR4	sedge	CAREX
	eastern hemlock	TSCA	spinulose shield fern	DRSP4
	eastern hophornbeam	OSVI		
	quaking aspen	POTR5	elderberry	SAMBU
	red maple	ACRU	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	red elderberry	SACA11
	yellow birch	BEAL2	twisted stalk	STAM2
			sweet cicely	OSCL
			oakfern	GYDR
			blue cohosh	CATH2
			wild sarsaparilla	ARNU2
			bloodroot	SACA13
			trillium	TRILL

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
319B: Noseum-----	balsam fir bigtooth aspen quaking aspen red maple sugar maple yellow birch	ABBA POGR4 POTR5 ACRU ACSA3 BEAL2	American fly honeysuckle starflower wild sarsaparilla large leaved aster sedge beaked hazelnut goldthread spinulose shield fern shining clubmoss ground pine Canada mayflower choke cherry brackenfern	LOCA7 TRBO2 ARNU2 ASMA2 CAREX COCO6 COPTI DRSP4 HULU2 LYOB MACA4 PRVI PTAQ
319C: McMillan-----	American basswood bigtooth aspen eastern hemlock eastern hophornbeam quaking aspen red maple sugar maple yellow birch	TIAM POGR4 TSCA OSVI POTR5 ACRU ACSA3 BEAL2	wild sarsaparilla ladyfern sedge spinulose shield fern elderberry hairy Solomon's seal red elderberry twisted stalk sweet cicely oakfern trillium blue cohosh bloodroot	ARNU2 ATFI CAREX DRSP4 SAMBU POPU4 SACA11 STAM2 OSCL GYDR TRILL CATH2 SACA13
Islandlake-----	American beech bigtooth aspen eastern hemlock eastern white pine paper birch quaking aspen red maple red pine sugar maple yellow birch	FAGR POGR4 TSCA PIST BEP4 POTR5 ACRU PIRE ACSA3 BEAL2	Canada mayflower yellow beedlily starflower bunchberry dogwood partridgeberry shining clubmoss beaked hazelnut lowbush blueberry blueberry wintergreen brackenfern wild sarsaparilla	MACA4 CLBO3 TRIEN COCA13 MIRE HULU2 COCO6 VAAN VACCI GAPR2 PTAQ ARNU2
319D: McMillan-----	American basswood bigtooth aspen eastern hemlock eastern hophornbeam quaking aspen red maple sugar maple yellow birch	TIAM POGR4 TSCA OSVI POTR5 ACRU ACSA3 BEAL2	hairy Solomon's seal ladyfern sedge spinulose shield fern elderberry bloodroot red elderberry wild sarsaparilla blue cohosh trillium oakfern sweet cicely twisted stalk	POPU4 ATFI CAREX DRSP4 SAMBU SACA13 SACA11 ARNU2 CATH2 TRILL GYDR OSCL STAM2

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
319D:				
Islandlake-----	American beech	FAGR	starflower	TRIEN
	bigtooth aspen	POGR4	wild sarsaparilla	ARNU2
	eastern hemlock	TSCA	wintergreen	GAPR2
	eastern white pine	PIST	yellow beadleily	CLBO3
	paper birch	BEPA	bunchberry dogwood	COCA13
	quaking aspen	POTR5	partridgeberry	MIRE
	red maple	ACRU	shining clubmoss	HULU2
	red pine	PIRE	beaked hazelnut	COCO6
	sugar maple	ACSA3	lowbush blueberry	VAAN
	yellow birch	BEAL2	blueberry	VACCI
			Canada mayflower	MACA4
			brackenfern	PTAQ
319E:				
McMillan-----	American basswood	TIAM	eastern hemlock	TSCA
	bigtooth aspen	POGR4	American basswood	TIAM
	black cherry	PRSE2	ladyfern	ATHYR
	eastern hemlock	TSCA	sugar maple	ACSA3
	quaking aspen	POTR5	red maple	ACRU
	red maple	ACRU	yellow birch	BEAL2
	sugar maple	ACSA3	American elm	ULAM
	yellow birch	BEAL2	twisted stalk	STAM2
			red elderberry	SACA11
			sedge	CAREX
			spinulose woodfern	DRCA11
			Canada mayflower	MACA4
			hairy Solomon's seal	POPU4
Islandlake-----	American beech	FAGR	yellow beadleily	CLBO3
	bigtooth aspen	POGR4	starflower	TRIEN
	eastern hemlock	TSCA	bunchberry dogwood	COCA13
	eastern white pine	PIST	partridgeberry	MIRE
	paper birch	BEPA	shining clubmoss	HULU2
	quaking aspen	POTR5	beaked hazelnut	COCO6
	red maple	ACRU	lowbush blueberry	VAAN
	red pine	PIRE	wild sarsaparilla	ARNU2
	sugar maple	ACSA3	Canada mayflower	MACA4
	yellow birch	BEAL2	blueberry	VACCI
			brackenfern	PTAQ
			wintergreen	GAPR2
322B:				
Stutts-----	eastern hemlock	TSCA	Canada mayflower	MACA4
	eastern white pine	PIST	brackenfern	PTERI
	jack pine	PIBA2	sedge	CAREX
	northern red oak	QURU	starflower	TRBO2
	paper birch	BEPA	shining clubmoss	HULU2
	quaking aspen	POTR5	barren strawberry	WAFR
	red pine	PIRE	beaked hazelnut	COCO6
	sugar maple	ACSA3		
	yellow birch	BEAL2		

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
322B: Keweenaw-----	balsam fir	ABBA	spinulose shield	DRSP4
	black cherry	PRSE2	fern	
	eastern hemlock	TSCA	bedstraw	GALIU
	eastern white pine	PIST	shining clubmoss	HULU2
	northern red oak	QURU	Canada mayflower	MACA4
	paper birch	BEPA	partridgeberry	MIRE
	quaking aspen	POTR5	brackenfern	PTAQ
	red maple	ACRU	sedge	CAREX
	sugar maple	ACSA3	wintergreen	GAPR2
	yellow birch	BEAL2	large leaved aster	ASMA2
			ground pine	LYOB
			velvetleaf	VAMY
			huckleberry	
			American starflower	TRBO2
			wild sarsaparilla	ARNU2
322C: Stutts-----	eastern hemlock	TSCA	shining clubmoss	HULU2
	eastern white pine	PIST	barren strawberry	WAFR
	jack pine	PIBA2	beaked hazelnut	COCO6
	northern red oak	QURU	sedge	CAREX
	paper birch	BEPA	starflower	TRBO2
	quaking aspen	POTR5	brackenfern	PTERI
	red pine	PIRE	Canada mayflower	MACA4
	sugar maple	ACSA3		
	yellow birch	BEAL2		
Keweenaw-----	balsam fir	ABBA	ground pine	LYOB
	black cherry	PRSE2	sedge	CAREX
	eastern hemlock	TSCA	spinulose shield	DRSP4
	eastern white pine	PIST	fern	
	northern red oak	QURU	bedstraw	GALIU
	paper birch	BEPA	shining clubmoss	HULU2
	quaking aspen	POTR5	Canada mayflower	MACA4
	red maple	ACRU	partridgeberry	MIRE
	sugar maple	ACSA3	brackenfern	PTAQ
	yellow birch	BEAL2	American starflower	TRBO2
			velvetleaf	VAMY
			huckleberry	
			large leaved aster	ASMA2
			wild sarsaparilla	ARNU2
			wintergreen	GAPR2
322D: Stutts-----	eastern hemlock	TSCA	Canada mayflower	MACA4
	eastern white pine	PIST	barren strawberry	WAFR
	jack pine	PIBA2	shining clubmoss	HULU2
	northern red oak	QURU	beaked hazelnut	COCO6
	paper birch	BEPA	sedge	CAREX
	quaking aspen	POTR5	starflower	TRBO2
	red pine	PIRE	brackenfern	PTERI
	sugar maple	ACSA3		
	yellow birch	BEAL2		

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
322D:				
Keweenaw-----	balsam fir	ABBA	velvetleaf	VAMY
	black cherry	PRSE2	huckleberry	
	eastern hemlock	TSCA	partridgeberry	MIRE
	eastern white pine	PIST	sedge	CAREX
	northern red oak	QURU	American starflower	TRBO2
	paper birch	BEPA	wild sarsaparilla	ARNU2
	quaking aspen	POTR5	large leaved aster	ASMA2
	red maple	ACRU	wintergreen	GAPR2
	sugar maple	ACSA3	brackenfern	PTAQ
	yellow birch	BEAL2	ground pine	LYOB
			Canada mayflower	MACA4
			shining clubmoss	HULU2
			bedstraw	GALIU
			spinulose shield fern	DRSP4
323B:				
Keweenaw-----	balsam fir	ABBA	spinulose woodfern	DRCA11
	black cherry	PRSE2	yellow beadlelily	CLBO3
	eastern hemlock	TSCA	shining clubmoss	HULU2
	eastern white pine	PIST	wild sarsaparilla	ARNU2
	northern red oak	QURU	red elderberry	SARAR3
	paper birch	BEPA	American starflower	TRBO2
	quaking aspen	POTR5	Canada mayflower	MACA4
	red maple	ACRU	brackenfern	PTAQ
	sugar maple	ACSA3	twistedstalk	STREP3
	yellow birch	BEAL2	feather Solomon's seal	MARAR
Kalkaska-----	bigtooth aspen	POGR4	starflower	TRBO2
	eastern white pine	PIST	elderberry	SAMBU
	northern red oak	QURU	sedge	CAREX
	paper birch	BEPA	hairy Solomon's seal	POPU4
	quaking aspen	POTR5	twisted stalk	STAM2
	red maple	ACRU	spinulose shield	DRSP4
	red pine	PIRE	fern	
	sugar maple	ACSA3	Canada mayflower	MACA4
323C:				
Keweenaw-----	balsam fir	ABBA	yellow beadlelily	CLBO3
	black cherry	PRSE2	wild sarsaparilla	ARNU2
	eastern hemlock	TSCA	shining clubmoss	HULU2
	eastern white pine	PIST	American starflower	TRBO2
	northern red oak	QURU	red elderberry	SARAR3
	paper birch	BEPA	Canada mayflower	MACA4
	quaking aspen	POTR5	western brackenfern	PTAQ
	red maple	ACRU	twistedstalk	STREP3
	sugar maple	ACSA3	feather Solomon's seal	MARAR
	yellow birch	BEAL2	seal	
			spinulose woodfern	DRCA11
Kalkaska-----	bigtooth aspen	POGR4	Canada mayflower	MACA4
	eastern white pine	PIST	spinulose shield	DRSP4
	northern red oak	QURU	fern	
	paper birch	BEPA	starflower	TRBO2
	quaking aspen	POTR5	sedge	CAREX
	red maple	ACRU	hairy Solomon's seal	POPU4
	red pine	PIRE	twisted stalk	STAM2
	sugar maple	ACSA3	elderberry	SAMBU

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
323D:				
Keweenaw-----	balsam fir	ABBA	yellow bluebeadlily	CLBO3
	black cherry	PRSE2	wild sarsaparilla	ARNU2
	eastern hemlock	TSCA	shining clubmoss	HULU2
	eastern white pine	PIST	American starflower	TRBO2
	northern red oak	QURU	Sambucus racemosa	SARAR3
	paper birch	BEPA	var. racemosa	
	quaking aspen	POTR5	Canada beadruby	MACA4
	red maple	ACRU	western brackenfern	PTAQ
	sugar maple	ACSA3	Streptopus	STLAR
	yellow birch	BEAL2	lanceolatus var. roseus	
			feather Solomon's seal	MARAR
			spinulose woodfern	DRCA11
Kalkaska-----	bigtooth aspen	POGR4	twisted stalk	STAM2
	eastern white pine	PIST	hairy Solomon's seal	POPU4
	northern red oak	QURU	sedge	CAREX
	paper birch	BEPA	elderberry	SAMBU
	quaking aspen	POTR5	starflower	TRBO2
	red maple	ACRU	spinulose shield	DRSP4
	red pine	PIRE	fern	
	sugar maple	ACSA3	Canada mayflower	MACA4
325B:				
Siskiwit-----	balsam fir	ABBA	beaked hazelnut	COCO6
	basswood	TILIA	spinulose shield	DRSP4
	red maple	ACRU	fern	
	sugar maple	ACSA3	ladyfern	ATFI
	white ash	FRAM2	oakfern	GYDR
	white spruce	PIGL	trillium	TRILL
			blue cohosh	CATH2
			Canada mayflower	MACA4
			wild sarsaparilla	ARNU2
			red elderberry	SACA11
			sedge	CAREX
			starflower	TRBO2
			white baneberry	ACPA
Gogebic-----	American basswood	TIAM	hairy Solomon's seal	POPU4
	eastern hemlock	TSCA	red elderberry	SACA11
	eastern hophornbeam	OSVI	white baneberry	ACPA
	northern red oak	QURU	wild sarsaparilla	ARNU2
	quaking aspen	POTR5	Jack in the pulpit	ARTR
	red maple	ACRU	common ladyfern	ATFI
	red pine	PIRE	rattlesnake fern	BOVI
	sugar maple	ACSA3	sedge	CAREX
	white ash	FRAM2	blue cohosh	CATH2
	yellow birch	BEAL2	yellow beadruby	CLBO3
			spinulose shield	DRSP4
			fern	
			bedstraw	GALIU
			oakfern	GYDR
			Canada mayflower	MACA4
			sensitive fern	ONSE
			sweet cicely	OSCL
			Maryland sanicle	SAMA2
			elderberry	SAMBU
			violet	VIOLA
			downy yellow violet	VIPU3
			twisted stalk	STAM2

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
325C:				
Siskiwit-----	balsam fir	ABBA	wild sarsaparilla	ARNU2
	basswood	TILIA	blue cohosh	CATH2
	red maple	ACRU	spinulose shield	DRSP4
	sugar maple	ACSA3	fern	
	white ash	FRAM2	oakfern	GYDR
	white spruce	PIGL	Canada mayflower	MACA4
			red elderberry	SACA11
			starflower	TRBO2
			trillium	TRILL
			white baneberry	ACPA
			ladyfern	ATFI
			beaked hazelnut	COCO6
			sedge	CAREX
Gogebic-----	American basswood	TIAM	bedstraw	GALIU
	eastern hemlock	TSCA	spinulose shield	DRSP4
	eastern hophornbeam	OSVI	fern	
	northern red oak	QURU	yellow beadlily	CLBO3
	quaking aspen	POTR5	blue cohosh	CATH2
	red maple	ACRU	rattlesnake fern	BOVI
	red pine	PIRE	oakfern	GYDR
	sugar maple	ACSA3	white baneberry	ACPA
	white ash	FRAM2	twisted stalk	STAM2
	yellow birch	BEAL2	red elderberry	SACA11
			hairy Solomon's seal	POPU4
			Canada mayflower	MACA4
			downy yellow violet	VIPU3
			common ladyfern	ATFI
			sweet cicely	OSCL
			Maryland sanicle	SAMA2
			elderberry	SAMBU
			violet	VIOLA
			Jack in the pulpit	ARTR
			sensitive fern	ONSE
			wild sarsaparilla	ARNU2
			sedge	CAREX
327:				
Foxpaw-----	balsam poplar	POBA2	small enchanter's	CIAL
	bigtooth aspen	POGR4	nightshade	
	black ash	FRNI	elderberry	SAMBU
	green ash	FRPE	spinulose shield	DRSP4
	quaking aspen	POTR5	fern	
	red maple	ACRU	jewelweed	IMCA
	sugar maple	ACSA3	Jack in the pulpit	ARTR
			common ladyfern	ATFI
			sedge	CAREX
			raspberry	RUIDI
			Canada mayflower	MACA4
			mint	MENTH
			grasses	POA
			gooseberry	RIBES
			dewberry	RUHIS3
Sarwet-----	American basswood	TIAM	red elderberry	SACA11
	bigtooth aspen	POGR4	twisted stalk	STAM2
	eastern hemlock	TSCA	spinulose shield	DRSP4
	quaking aspen	POTR5	fern	
	red maple	ACRU	Canada mayflower	MACA4
	sugar maple	ACSA3	hairy Solomon's seal	POPU4
	yellow birch	BEAL2	sedge	CAREX
			ladyfern	ATHYR

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
328B:				
Annalake-----	balsam fir	ABBA	ladyfern	ATFI
	eastern white pine	PIST	white baneberry	ACPA
	green ash	FRPE	downy yellow violet	VIPU3
	paper birch	BEPA	spinulose shield	DRSP4
	quaking aspen	POTRT	fern	
	red maple	ACRU	false Solomon's seal	SMILA
	sugar maple	ACSA3	sweet cicely	OSCL
	white spruce	PIGL	sensitive fern	ONSE
	yellow birch	BEAL2		
Karlin-----	American basswood	TIAM	spinulose shield	DRSP4
	eastern hophornbeam	OSVI	fern	
	quaking aspen	POTR5	bedstraw	GALIU
	red pine	PIRE	Canada mayflower	MACA4
	sugar maple	ACSA3	sweet cicely	OSCL
	white ash	FRAM2	hairy Solomon's seal	POPU4
	yellow birch	BEAL2	red elderberry	SACA11
			blue cohosh	CATH2
			trillium	TRILL
			Canada white violet	VICA4
			downy yellow violet	VIPU3
			smooth yellow violet	VIPUP2
			sedge	CAREX
			rattlesnake fern	BOVI
			false Solomon's seal	SMILA
			twisted stalk	STAM2
			ladyfern	ATHYR
			Jack in the pulpit	ARTR
328C:				
Annalake-----	balsam fir	ABBA	downy yellow violet	VIPU3
	eastern white pine	PIST	ladyfern	ATFI
	green ash	FRPE	white baneberry	ACPA
	paper birch	BEPA	spinulose shield	DRSP4
	quaking aspen	POTRT	fern	
	red maple	ACRU	false Solomon's seal	SMILA
	sugar maple	ACSA3	sensitive fern	ONSE
	white spruce	PIGL	sweet cicely	OSCL
	yellow birch	BEAL2		
Karlin-----	American basswood	TIAM	spinulose shield	DRSP4
	eastern hophornbeam	OSVI	fern	
	quaking aspen	POTR5	blue cohosh	CATH2
	red pine	PIRE	sedge	CAREX
	sugar maple	ACSA3	rattlesnake fern	BOVI
	white ash	FRAM2	ladyfern	ATHYR
	yellow birch	BEAL2	Jack in the pulpit	ARTR
			bedstraw	GALIU
			Canada white violet	VICA4
			American elm	ULAM
			eastern hemlock	TSCA
			trillium	TRILL
			American basswood	TIAM
			Canada mayflower	MACA4
			sweet cicely	OSCL
			red elderberry	SACA11
			smooth yellow violet	VIPUP2
			twisted stalk	STAM2
			downy yellow violet	VIPU3
			false Solomon's seal	SMILA
			hairy Solomon's seal	POPU4

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
328D: Karlin-----	American basswood	TIAM	red elderberry	SACA11
	quaking aspen	POTR5	sugar maple	ACSA3
	red pine	PIRE	Jack in the pulpit	ARTR
	sugar maple	ACSA3	ladyfern	ATHYR
			yellow birch	BEAL2
			rattlesnake fern	BOVI
			smooth yellow violet	VIPUP2
			downy yellow violet	VIPU3
			Canada white violet	VICA4
			American elm	ULAM
			eastern hemlock	TSCA
			trillium	TRILL
			American basswood	TIAM
			twisted stalk	STAM2
			false Solomon's seal	SMILA
			sedge	CAREX
			hairy Solomon's seal	POPU4
			sweet cicely	OSCL
			eastern hophornbeam	OSVI
			Canada mayflower	MACA4
			bedstraw	GALIU
			white ash	FRAM2
			spinulose woodfern	DRCA11
			blue cohosh	CATH2
Zandi-----	American basswood	TIAM	spinulose shield	DRSP4
	eastern white pine	PIST	fern	
	northern red oak	QURU	moss	2MOSS
	red maple	ACRU	ladyfern	ATFI
	red pine	PIRE	twisted stalk	STAM2
	sugar maple	ACSA3	Canada mayflower	MACA4
	yellow birch	BEAL2	wild sarsaparilla	ARNU2
329A: Tula-----	balsam fir	ABBA	bunchberry dogwood	COCA13
	eastern hemlock	TSCA	yellow beadlely	CLBO3
	eastern white pine	PIST	American starflower	TRBO2
	quaking aspen	POTRT	twisted stalk	STAM2
	red maple	ACRU	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	sedge	CAREX
			wild sarsaparilla	ARNU2
			wood sorrel	OXMO
			Canada mayflower	MACA4
			American fly	LOCA7
			honeysuckle	
			shining clubmoss	HULU2
			oakfern	GYDR
			wintergreen	GAPR2
			spinulose shield	DRSP4
			fern	
			goldthread	COPTI

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
351B: Gogebic-----	American basswood	TIAM	white baneberry	ACPA
	eastern hemlock	TSCA	wild sarsaparilla	ARNU2
	eastern hophornbeam	OSVI	Jack in the pulpit	ARTR
	northern red oak	QURU	common ladyfern	ATFI
	quaking aspen	POTR5	rattlesnake fern	BOVI
	red maple	ACRU	sedge	CAREX
	red pine	PIRE	blue cohosh	CATH2
	sugar maple	ACSA3	yellow beadlelily	CLBO3
	white ash	FRAM2	spinulose shield	DRSP4
	yellow birch	BEAL2	fern	
			bedstraw	GALIU
			oakfern	GYDR
			Canada mayflower	MACA4
			sensitive fern	ONSE
			sweet cicely	OSCL
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			Maryland sanicle	SAMA2
			elderberry	SAMBU
			twisted stalk	STAM2
			violet	VIOLA
			downy yellow violet	VIPU3
351C: Gogebic-----	American basswood	TIAM	white baneberry	ACPA
	eastern hemlock	TSCA	blue cohosh	CATH2
	eastern hophornbeam	OSVI	red elderberry	SACA11
	northern red oak	QURU	hairy Solomon's seal	POPU4
	quaking aspen	POTR5	Jack in the pulpit	ARTR
	red maple	ACRU	common ladyfern	ATFI
	red pine	PIRE	rattlesnake fern	BOVI
	sugar maple	ACSA3	sedge	CAREX
	white ash	FRAM2	wild sarsaparilla	ARNU2
	yellow birch	BEAL2	yellow beadlelily	CLBO3
			downy yellow violet	VIPU3
			violet	VIOLA
			twisted stalk	STAM2
			elderberry	SAMBU
			Maryland sanicle	SAMA2
			sweet cicely	OSCL
			sensitive fern	ONSE
			Canada mayflower	MACA4
			oakfern	GYDR
			bedstraw	GALIU
			spinulose shield	DRSP4
			fern	

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
351D: Gogebic-----	American basswood	TIAM	yellow beadleily	CLBO3
	eastern hemlock	TSCA	white baneberry	ACPA
	eastern hophornbeam	OSVI	wild sarsaparilla	ARNU2
	northern red oak	QURU	Jack in the pulpit	ARTR
	quaking aspen	POTR5	blue cohosh	CATH2
	red maple	ACRU	common ladyfern	ATFI
	red pine	PIRE	rattlesnake fern	BOVI
	sugar maple	ACSA3	sedge	CAREX
	white ash	FRAM2	spinulose shield	DRSP4
	yellow birch	BEAL2	fern	
			bedstraw	GALIU
			oakfern	GYDR
			Canada mayflower	MACA4
			sensitive fern	ONSE
			sweet cicely	OSCL
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			Maryland sanicle	SAMA2
			elderberry	SAMBU
			twisted stalk	STAM2
			violet	VIOLA
			downy yellow violet	VIPU3
351E: Schweitzer-----	American basswood	TIAM	elderberry	SAMBU
	balsam fir	ABBA	twisted stalk	STAM2
	eastern hemlock	TSCA	starflower	TRIEU
	eastern hophornbeam	OSVI	downy yellow violet	VIPU3
	eastern white pine	PIST	sedge	CAREX
	northern red oak	QURU	spinulose shield	DRSP4
	quaking aspen	POTR5	fern	
	red maple	ACRU	Canada mayflower	MACA4
	sugar maple	ACSA3	hairy Solomon's seal	POPU4
351F: Schweitzer-----	American basswood	TIAM	elderberry	SAMBU
	balsam fir	ABBA	twisted stalk	STAM2
	eastern hemlock	TSCA	starflower	TRIEU
	eastern hophornbeam	OSVI	hairy Solomon's seal	POPU4
	eastern white pine	PIST	Canada mayflower	MACA4
	northern red oak	QURU	spinulose shield	DRSP4
	quaking aspen	POTR5	fern	
	red maple	ACRU	sedge	CAREX
	sugar maple	ACSA3	downy yellow violet	VIPU3
353A: Tula-----	balsam fir	ABBA	wild sarsaparilla	ARNU2
	eastern hemlock	TSCA	sedge	CAREX
	eastern white pine	PIST	hairy Solomon's seal	POPU4
	quaking aspen	POTRT	wood sorrel	OXMO
	red maple	ACRU	American starflower	TRBO2
	sugar maple	ACSA3	twisted stalk	STAM2
			American fly	LOCA7
			honeysuckle	
			shining clubmoss	HULU2
			wintergreen	GAPR2
			spinulose shield	DRSP4
			fern	
			yellow beadleily	CLBO3
			oakfern	GYDR
			Canada mayflower	MACA4
			goldthread	COPTI
			bunchberry dogwood	COCA13

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
354B: Gogebic-----	American basswood	TIAM	downy yellow violet	VIPU3
	eastern hemlock	TSCA	wild sarsaparilla	ARNU2
	eastern hophornbeam	OSVI	Maryland sanicle	SAMA2
	northern red oak	QURU	elderberry	SAMBU
	quaking aspen	POTR5	yellow beادلily	CLBO3
	red maple	ACRU	violet	VIOLA
	red pine	PIRE	sweet cicely	OSCL
	sugar maple	ACSA3	oakfern	GYDR
	white ash	FRAM2	common ladyfern	ATFI
	yellow birch	BEAL2	Canada mayflower	MACA4
			bedstraw	GALIU
			blue cohosh	CATH2
			sedge	CAREX
			rattlesnake fern	BOVI
			Jack in the pulpit	ARTR
			sensitive fern	ONSE
			spinulose shield fern	DRSP4
			white baneberry	ACPA
354C: Gogebic-----	American basswood	TIAM	blue cohosh	CATH2
	eastern hemlock	TSCA	sedge	CAREX
	eastern hophornbeam	OSVI	rattlesnake fern	BOVI
	northern red oak	QURU	Jack in the pulpit	ARTR
	quaking aspen	POTR5	bedstraw	GALIU
	red maple	ACRU	Canada mayflower	MACA4
	red pine	PIRE	sweet cicely	OSCL
	sugar maple	ACSA3	violet	VIOLA
	white ash	FRAM2	yellow beادلily	CLBO3
	yellow birch	BEAL2	white baneberry	ACPA
			Maryland sanicle	SAMA2
			wild sarsaparilla	ARNU2
			downy yellow violet	VIPU3
			sensitive fern	ONSE
			common ladyfern	ATFI
			oakfern	GYDR
			spinulose shield fern	DRSP4
			elderberry	SAMBU
354D: Gogebic-----	American basswood	TIAM	yellow beادلily	CLBO3
	eastern hemlock	TSCA	oakfern	GYDR
	eastern hophornbeam	OSVI	spinulose shield	DRSP4
	northern red oak	QURU	fern	
	quaking aspen	POTR5	elderberry	SAMBU
	red maple	ACRU	Canada mayflower	MACA4
	red pine	PIRE	bedstraw	GALIU
	sugar maple	ACSA3	blue cohosh	CATH2
	white ash	FRAM2	sedge	CAREX
	yellow birch	BEAL2	rattlesnake fern	BOVI
			Jack in the pulpit	ARTR
			Maryland sanicle	SAMA2
			common ladyfern	ATFI
			violet	VIOLA
			sweet cicely	OSCL
			downy yellow violet	VIPU3
			white baneberry	ACPA
			wild sarsaparilla	ARNU2
			sensitive fern	ONSE

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
354E:				
Schweitzer-----	American basswood	TIAM	twisted stalk	STAM2
	balsam fir	ABBA	starflower	TRIEN
	eastern hemlock	TSCA	elderberry	SAMBU
	eastern hophornbeam	OSVI	sedge	CAREX
	eastern white pine	PIST	spinulose shield	DRSP4
	northern red oak	QURU	fern	
	quaking aspen	POTR5	Canada mayflower	MACA4
	red maple	ACRU	downy yellow violet	VIPU3
	sugar maple	ACSA3	hairy Solomon's seal	POPU4
354F:				
Schweitzer-----	American basswood	TIAM	sedge	CAREX
	balsam fir	ABBA	spinulose shield	DRSP4
	eastern hemlock	TSCA	fern	
	eastern hophornbeam	OSVI	Canada mayflower	MACA4
	eastern white pine	PIST	downy yellow violet	VIPU3
	northern red oak	QURU	hairy Solomon's seal	POPU4
	quaking aspen	POTR5	starflower	TRIEN
	red maple	ACRU	elderberry	SAMBU
	sugar maple	ACSA3	twisted stalk	STAM2
363C:				
Talus.				
Arcadian-----	American elm	ULAM	sweet cicely	OSCL
	bigtooth aspen	POGR4	smooth yellow violet	VIPUP2
	black cherry	PRSE2	eastern hophornbeam	OSVI
	eastern hemlock	TSCA	Canada mayflower	MACA4
	eastern hophornbeam	OSVI	bedstraw	GALIU
	white ash	FRAM2	white ash	FRAM2
	yellow birch	BEAL2	spinulose woodfern	DRCA11
	American basswood	TIAM	blue cohosh	CATH2
	quaking aspen	POTR5	sedge	CAREX
	sugar maple	ACSA3	rattlesnake fern	BOVI
			yellow birch	BEAL2
			ladyfern	ATHYR
			Jack in the pulpit	ARTR
			downy yellow violet	VIPU3
			Canada white violet	VICA4
			American elm	ULAM
			eastern hemlock	TSCA
			trillium	TRILL
			American basswood	TIAM
			twisted stalk	STAM2
			false Solomon's seal	SMILA
			red elderberry	SACA11
			hairy Solomon's seal	POPU4
			sugar maple	ACSA3
363D:				
Talus.				

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
363D: Arcadian-----	American elm	ULAM	smooth yellow violet	VIPUP2
	bigtooth aspen	POGR4	Canada white violet	VICA4
	black cherry	PRSE2	American elm	ULAM
	eastern hemlock	TSCA	eastern hemlock	TSCA
	eastern hophornbeam	OSVI	trillium	TRILL
	white ash	FRAM2	American basswood	TIAM
	yellow birch	BEAL2	false Solomon's seal	SMILA
	American basswood	TIAM	red elderberry	SACA11
	quaking aspen	POTR5	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	sweet cicely	OSCL
			eastern hophornbeam	OSVI
			Canada mayflower	MACA4
			white ash	FRAM2
			spinulose woodfern	DRCA11
			blue cohosh	CATH2
			sedge	CAREX
			rattlesnake fern	BOVI
			yellow birch	BEAL2
			ladyfern	ATHYR
			Jack in the pulpit	ARTR
			sugar maple	ACSA3
			bedstraw	GALIU
			downy yellow violet	VIPU3
			twisted stalk	STAM2
363E: Talus.				
Arcadian-----	American elm	ULAM	sweet cicely	OSCL
	bigtooth aspen	POGR4	smooth yellow violet	VIPUP2
	black cherry	PRSE2	downy yellow violet	VIPU3
	eastern hemlock	TSCA	Canada white violet	VICA4
	eastern hophornbeam	OSVI	American elm	ULAM
	white ash	FRAM2	eastern hemlock	TSCA
	yellow birch	BEAL2	trillium	TRILL
	American basswood	TIAM	American basswood	TIAM
	quaking aspen	POTR5	twisted stalk	STAM2
	sugar maple	ACSA3	false Solomon's seal	SMILA
			red elderberry	SACA11
			hairy Solomon's seal	POPU4
			eastern hophornbeam	OSVI
			Canada mayflower	MACA4
			bedstraw	GALIU
			white ash	FRAM2
			spinulose woodfern	DRCA11
			blue cohosh	CATH2
			sedge	CAREX
			rattlesnake fern	BOVI
			yellow birch	BEAL2
			ladyfern	ATHYR
			Jack in the pulpit	ARTR
			sugar maple	ACSA3
363F: Talus.				

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
363F: Arcadian-----	American elm	ULAM	Jack in the pulpit	ARTR
	bigtooth aspen	POGR4	sugar maple	ACSA3
	black cherry	PRSE2	yellow birch	BEAL2
	eastern hemlock	TSCA	rattlesnake fern	BOVI
	eastern hophornbeam	OSVI	sedge	CAREX
	white ash	FRAM2	blue cohosh	CATH2
	yellow birch	BEAL2	spinulose woodfern	DRCA11
	American basswood	TIAM	white ash	FRAM2
	quaking aspen	POTR5	bedstraw	GALIU
	sugar maple	ACSA3	Canada white violet	VICA4
			downy yellow violet	VIPU3
			smooth yellow violet	VIPUP2
			Canada mayflower	MACA4
			eastern hophornbeam	OSVI
			sweet cicely	OSCL
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			false Solomon's seal	SMILA
			twisted stalk	STAM2
			American basswood	TIAM
			trillium	TRILL
			eastern hemlock	TSCA
			American elm	ULAM
			ladyfern	ATHYR
364F. Talus				
365F. Rock outcrop				
369C: Dishno-----	American basswood	TIAM	violet	VIOLA
	quaking aspen	POTR5	thimbleberry	RUPA
	red pine	PIRE	Jack in the pulpit	ARTR
	sugar maple	ACSA3	ladyfern	ATHYR
			rattlesnake fern	BOVI
			sedge	CAREX
			blue cohosh	CATH2
			spinulose shield fern	DRSP4
			bedstraw	GALIU
			Canada mayflower	MACA4
			twistedstalk	STREP3

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
369C: Gogebic-----	American basswood	TIAM	oakfern	GYDR
	eastern hemlock	TSCA	Canada mayflower	MACA4
	eastern hophornbeam	OSVI	yellow beadlelily	CLBO3
	northern red oak	QURU	violet	VIOLA
	quaking aspen	POTR5	twisted stalk	STAM2
	red maple	ACRU	elderberry	SAMBU
	red pine	PIRE	Maryland sanicle	SAMA2
	sugar maple	ACSA3	red elderberry	SACA11
	white ash	FRAM2	white baneberry	ACPA
	yellow birch	BEAL2	wild sarsaparilla	ARNU2
			Jack in the pulpit	ARTR
			common ladyfern	ATFI
			rattlesnake fern	BOVI
			sedge	CAREX
			blue cohosh	CATH2
			hairy Solomon's seal	POPU4
			spinulose shield	DRSP4
			fern	
			bedstraw	GALIU
			downy yellow violet	VIPU3
			sensitive fern	ONSE
			sweet cicely	OSCL
Peshekee-----	eastern hemlock	TSCA	wild sarsaparilla	ARNU2
	eastern white pine	PIST	blueberry	VACCI
	northern red oak	QURU	Canada yew	TACA7
	paper birch	BEPA	bigleaf aster	ASMA2
	quaking aspen	POTRT	buffaloberry	SHEPH
	red maple	ACRU	brackenfern	PTAQ
	red pine	PIRE	hawthorn	CRATA
	sugar maple	ACSA3	sedge	CAREX
	yellow birch	BEAL2		
Rock outcrop.				
369D: Dishno-----	American basswood	TIAM	twistedstalk	STREP3
	northern whitecedar	THOC2	violet	VIOLA
	quaking aspen	POTR5	thimbleberry	RUPA
	red pine	PIRE	Jack in the pulpit	ARTR
	sugar maple	ACSA3	ladyfern	ATHYR
			rattlesnake fern	BOVI
			sedge	CAREX
			spinulose shield	DRSP4
			fern	
			bedstraw	GALIU
			Canada mayflower	MACA4
			blue cohosh	CATH2

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
369D: Gogebic-----	American basswood	TIAM	hairy Solomon's seal	POPU4
	eastern hemlock	TSCA	red elderberry	SACA11
	eastern hophornbeam	OSVI	blue cohosh	CATH2
	northern red oak	QURU	yellow beadlelily	CLBO3
	quaking aspen	POTR5	spinulose shield	DRSP4
	red maple	ACRU	fern	
	red pine	PIRE	violet	VIOLA
	sugar maple	ACSA3	twisted stalk	STAM2
	white ash	FRAM2	elderberry	SAMBU
	yellow birch	BEAL2	white baneberry	ACPA
			wild sarsaparilla	ARNU2
			Jack in the pulpit	ARTR
			common ladyfern	ATFI
			rattlesnake fern	BOVI
			sedge	CAREX
			Maryland sanicle	SAMA2
			bedstraw	GALIUI
			oakfern	GYDR
			Canada mayflower	MACA4
			sensitive fern	ONSE
			sweet cicely	OSCL
			downy yellow violet	VIPU3
Peshekee-----	eastern hemlock	TSCA	brackenfern	PTAQ
	eastern white pine	PIST	hawthorn	CRATA
	northern red oak	QURU	wild sarsaparilla	ARNU2
	paper birch	BEPA	blueberry	VACCI
	quaking aspen	POTRT	buffaloberry	SHEPH
	red maple	ACRU	Canada yew	TACA7
	red pine	PIRE	sedge	CAREX
	sugar maple	ACSA3	bigleaf aster	ASMA2
	yellow birch	BEAL2		
Rock outcrop.				
369E: Michigamme-----	American basswood	TIAM	ladyfern	ATHYR
	bigtooth aspen	POGR4	rattlesnake fern	BOVI
	eastern hemlock	TSCA	sedge	CAREX
	eastern hophornbeam	OSVI	blue cohosh	CATH2
	eastern white pine	PIST	spinulose shield	DRSP4
	northern red oak	QURU	fern	
	quaking aspen	POTR5	bedstraw	GALIUI
	sugar maple	ACSA3	Canada mayflower	MACA4
	yellow birch	BEAL2	Jack in the pulpit	ARTR
			downy yellow violet	VIPU3
			Canada white violet	VICA4
			trillium	TRILL
			twisted stalk	STAM2
			false Solomon's seal	SMILA
			red elderberry	SACA11
			hairy Solomon's seal	POPU4
			smooth yellow violet	VIPUP2
			sweet cicely	OSCL

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
369E:				
Schweitzer-----	American basswood	TIAM	downy yellow violet	VIPU3
	balsam fir	ABBA	starflower	TRIEN
	eastern hemlock	TSCA	elderberry	SAMBU
	eastern hophornbeam	OSVI	twisted stalk	STAM2
	eastern white pine	PIST	sedge	CAREX
	northern red oak	QURU	spinulose shield	DRSP4
	quaking aspen	POTR5	fern	
	red maple	ACRU	Canada mayflower	MACA4
	sugar maple	ACSA3	hairy Solomon's seal	POPU4
Peshekee-----	eastern hemlock	TSCA	bigleaf aster	ASMA2
	eastern white pine	PIST	sedge	CAREX
	northern red oak	QURU	hawthorn	CRATA
	paper birch	BEPA	brackenfern	PTAQ
	quaking aspen	POTRT	wild sarsaparilla	ARNU2
	red maple	ACRU	Canada yew	TACA7
	red pine	PIRE	buffaloberry	SHEPH
	sugar maple	ACSA3	blueberry	VACCI
	yellow birch	BEAL2		
Rock outcrop.				
369F:				
Michigamme-----	American basswood	TIAM	smooth yellow violet	VIPUP2
	bigtooth aspen	POGR4	bedstraw	GALIU
	eastern hemlock	TSCA	Jack in the pulpit	ARTR
	eastern hophornbeam	OSVI	ladyfern	ATHYR
	eastern white pine	PIST	rattlesnake fern	BOVI
	northern red oak	QURU	sedge	CAREX
	quaking aspen	POTR5	blue cohosh	CATH2
	sugar maple	ACSA3	spinulose shield	DRSP4
	yellow birch	BEAL2	fern	
			downy yellow violet	VIPU3
			Canada mayflower	MACA4
			sweet cicely	OSCL
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			false Solomon's seal	SMILA
			twisted stalk	STAM2
			trillium	TRILL
			Canada white violet	VICA4
Schweitzer-----	American basswood	TIAM	downy yellow violet	VIPU3
	balsam fir	ABBA	starflower	TRIEN
	eastern hemlock	TSCA	elderberry	SAMBU
	eastern hophornbeam	OSVI	twisted stalk	STAM2
	eastern white pine	PIST	sedge	CAREX
	northern red oak	QURU	spinulose shield	DRSP4
	quaking aspen	POTR5	fern	
	red maple	ACRU	Canada mayflower	MACA4
	sugar maple	ACSA3	hairy Solomon's seal	POPU4
Peshekee-----	eastern hemlock	TSCA	wild sarsaparilla	ARNU2
	eastern white pine	PIST	bigleaf aster	ASMA2
	northern red oak	QURU	sedge	CAREX
	paper birch	BEPA	hawthorn	CRATA
	quaking aspen	POTRT	brackenfern	PTAQ
	red maple	ACRU	buffaloberry	SHEPH
	red pine	PIRE	Canada yew	TACA7
	sugar maple	ACSA3	blueberry	VACCI
	yellow birch	BEAL2		
Rock outcrop.				

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
370E:				
Peshekee-----	eastern hemlock	TSCA	hawthorn	CRATA
	eastern white pine	PIST	blueberry	VACCI
	northern red oak	QURU	wild sarsaparilla	ARNU2
	paper birch	BEPA	bigleaf aster	ASMA2
	quaking aspen	POTRT	sedge	CAREX
	red maple	ACRU	Canada yew	TACA7
	red pine	PIRE	brackenfern	PTAQ
	sugar maple	ACSA3	buffaloberry	SHEPH
	yellow birch	BEAL2		
Rock outcrop.				
370F:				
Peshekee-----	eastern hemlock	TSCA	blueberry	VACCI
	eastern white pine	PIST	Canada yew	TACA7
	northern red oak	QURU	wild sarsaparilla	ARNU2
	paper birch	BEPA	bigleaf aster	ASMA2
	quaking aspen	POTRT	sedge	CAREX
	red maple	ACRU	hawthorn	CRATA
	red pine	PIRE	brackenfern	PTAQ
	sugar maple	ACSA3	buffaloberry	SHEPH
	yellow birch	BEAL2		
Rock outcrop.				
375.				
Dumps and Pits, mine				
380:				
Beseman-----	balsam poplar	POBA2	marsh marigold	CALTH
	black spruce	PIMA	sedge	CAREX
	eastern hemlock	TSCA	yellow beadlily	CLB03
	northern whitecedar	THOC2	bunchberry dogwood	COCA13
	paper birch	BEPA	goldthread	COPTI
	red maple	ACRU	woodfern	DRYOP
	yellow birch	BEAL2	creeping snowberry	GAHI2
			cinnamon fern	OSCI
			gooseberry	RIBES
			sphagnum moss	SPHAG*
			starflower	TRB02
			blueberry	VACCI
			wild raisin	VICA
Greenwood-----	black spruce	PIMA	small cranberry	VAOX
	red maple	ACRU	bog rosemary	ANPO
	tamarack	LALA	purple pitcherplant	SAPU4
			bog Labrador tea	LEGR
			sphagnum moss	SPHAG*
			leatherleaf	CHCA2
			velvetleaf	VAMY
			huckleberry	

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
382:				
Cathro-----	balsam fir	ABBA	spinulose shield	DRSP4
	black ash	FRNI	fern	
	northern whitecedar	THOC2	northern dewberry	RUFL
	paper birch	BEPa	American starflower	TRBO2
	red maple	ACRU	rattlesnake fern	BOVI
	tamarack	LALA	bedstraw	GALIU
	white spruce	PIGL	sedge	CAREX
			common ladyfern	ATFI
			naked miterwort	MINU3
			sphagnum moss	SPHAG*
			woodsorrel	OXALI
			goldthread	COPTI
Arnheim-----	balsam fir	ABBA	sedge	CAREX
	black ash	FRNI	cinnamon fern	OSCI
	green ash	FRPE	speckled alder	ALINR
	northern whitecedar	THOC2	sphagnum moss	SPHAG*
	paper birch	BEPa	common ladyfern	ATFI
	quaking aspen	POTR5	nettle	URTIC
	red maple	ACRU	redosier dogwood	COST4
	tamarack	LALA	naked miterwort	MINU3
	white spruce	PIGL	horsetail	EQUIS
	yellow birch	BEAL2	sensitive fern	ONSE
			jewelweed	IMCA
			ostrich fern	MAST
			mint	MENTH
388:				
Gay-----	American basswood	TIAM	starflower	TRBO2
	balsam fir	ABBA	brackenfern	PTERI
	black spruce	PIMA	grasses	POA
	green ash	FRPE	wood sorrel	OXMO
	red maple	ACRU	Canada mayflower	MACA4
	tamarack	LALA	American fly	LOCA7
	white spruce	PIGL	honeysuckle	
			shining clubmoss	HULU2
			wintergreen	GAPR2
			blueberry	VACCI
			twisted stalk	STAM2
			sedge	CAREX
			yellow beادلily	CLBO3
			bunchberry dogwood	COCA13
			goldthread	COPTI
			spinulose shield	DRSP4
			fern	
Tula-----	balsam fir	ABBA	Canada mayflower	MACA4
	eastern hemlock	TSCA	wood sorrel	OXMO
	eastern white pine	PIST	wild sarsaparilla	ARNU2
	quaking aspen	POTRT	sedge	CAREX
	red maple	ACRU	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	American fly	LOCA7
			honeysuckle	
			shining clubmoss	HULU2
			oakfern	GYDR
			yellow beادلily	CLBO3
			wintergreen	GAPR2
			spinulose shield	DRSP4
			fern	
			goldthread	COPTI
			American starflower	TRBO2
			bunchberry dogwood	COCA13
			twisted stalk	STAM2

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
398B:				
Tula-----	balsam fir	ABBA	oakfern	GYDR
	eastern hemlock	TSCA	twisted stalk	STAM2
	eastern white pine	PIST	hairy Solomon's seal	POPU4
	quaking aspen	POTRT	sedge	CAREX
	red maple	ACRU	wild sarsaparilla	ARNU2
	sugar maple	ACSA3	wood sorrel	OXMO
			Canada mayflower	MACA4
			American fly	LOCA7
			honeysuckle	
			shining clubmoss	HULU2
			American starflower	TRBO2
			wintergreen	GAPR2
			spinulose shield	DRSP4
			fern	
			goldthread	COPTI
			yellow beadleily	CLBO3
			bunchberry dogwood	COCA13
Gay-----	American basswood	TIAM	spinulose shield	DRSP4
	balsam fir	ABBA	fern	
	black spruce	PIMA	wintergreen	GAPR2
	green ash	FRPE	shining clubmoss	HULU2
	red maple	ACRU	American fly	LOCA7
	tamarack	LALA	honeysuckle	
	white spruce	PIGL	Canada mayflower	MACA4
			wood sorrel	OXMO
			goldthread	COPTI
			brackenfern	PTERI
			twisted stalk	STAM2
			starflower	TRBO2
			blueberry	VACCI
			bunchberry dogwood	COCA13
			yellow beadleily	CLBO3
			sedge	CAREX
			grasses	POA
Wakefield-----	American basswood	TIAM	Canada mayflower	MACA4
	balsam fir	ABBA	bedstraw	GALIU
	eastern hemlock	TSCA	spinulose shield	DRSP4
	eastern white pine	PIST	fern	
	northern red oak	QURU	blue cohosh	CATH2
	quaking aspen	POTR5	sedge	CAREX
	red pine	PIRE	rattlesnake fern	BOVI
	sugar maple	ACSA3	ladyfern	ATHYR
	yellow birch	BEAL2	Jack in the pulpit	ARTR
418:				
Loxley-----	balsam fir	ABBA	blueberry	VACCI
	black spruce	PIMA	bog Labrador tea	LEGR
	tamarack	LALA	creeping snowberry	GAHI2
			bunchberry dogwood	COCA13
			sphagnum moss	SPHAG*
			black spruce	PIMA
			sedge	CAREX
			leatherleaf	CHCA2
			yellow beadleily	CLBO3

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
418: Beseman-----	balsam poplar black spruce eastern hemlock northern whitecedar paper birch red maple yellow birch	POBA2 PIMA TSCA THOC2 BEPA ACRU BEAL2	bunchberry dogwood woodfern creeping snowberry cinnamon fern gooseberry yellow beadlily blueberry wild raisin sedge starflower sphagnum moss marsh marigold goldthread	COCA13 DRYOP GAHI2 OSCI RIBES CLBO3 VACCI VICA CAREX TRBO2 SPHAG* CALTH COPTI
419: Pleine-----	balsam fir balsam poplar black ash northern whitecedar paper birch red maple	ABBA POBA2 FRNI THOC2 BEPA ACRU	elderberry American red raspberry northern dewberry stinging nettle ladyfern nightshade gooseberry misc. perennial grasses mint Canada mayflower jewelweed sedge	SAMBU RUID RUFL URDI ATFI SOLAN RIBES PPGG MENTH MACA4 IMCA CAREX
Cathro-----	balsam fir black ash northern whitecedar paper birch red maple tamarack white spruce	ABBA FRNI THOC2 BEPA ACRU LALA PIGL	bedstraw rattlesnake fern American starflower sedge spinulose shield fern northern dewberry goldthread woodsorrel sphagnum moss naked miterwort common ladyfern	GALIU BOVI TRBO2 CAREX DRSP4 RUFL COPTI OXALI SPHAG* MINU3 ATFI
Gay-----	American basswood balsam fir black spruce green ash red maple tamarack white spruce	TIAM ABBA PIMA FRPE ACRU LALA PIGL	brackenfern twisted stalk starflower grasses wood sorrel Canada mayflower wintergreen spinulose shield fern goldthread bunchberry dogwood yellow beadlily sedge shining clubmoss American fly honeysuckle blueberry	PTERI STAM2 TRBO2 POA OXMO MACA4 GAPR2 DRSP4 COPTI COCA13 CLBO3 CAREX HULU2 LOCA7 VACCI

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
424: Gay-----	American basswood	TIAM	blueberry	VACCI
	balsam fir	ABBA	sedge	CAREX
	black spruce	PIMA	yellow beadlily	CLB03
	green ash	FRPE	bunchberry dogwood	COCA13
	red maple	ACRU	goldthread	COPTI
	tamarack	LALA	woodfern	DRYOP
	white spruce	PIGL	wintergreen	GAPR2
			shining clubmoss	HULU2
			American fly	LOCA7
			honeysuckle	
			Canada mayflower	MACA4
			wood sorrel	OXMO
			grasses	POA
			brackenfern	PTERI
			twisted stalk	STAM2
			starflower	TRB02
425: Foxpaw-----	balsam poplar	POBA2	raspberry	RUIDI
	bigtooth aspen	POGR4	Jack in the pulpit	ARTR
	black ash	FRNI	common ladyfern	ATFI
	green ash	FRPE	sedge	CAREX
	quaking aspen	POTR5	small enchanter's	CTAL
	red maple	ACRU	nightshade	
	sugar maple	ACSA3	spinulose shield	DRSP4
			fern	
			jewelweed	IMCA
			Canada mayflower	MACA4
			mint	MENTH
			grasses	POA
			gooseberry	RIBES
			elderberry	SAMBU
			dewberry	RUHIS3
Gay-----	American basswood	TIAM	yellow beadlily	CLB03
	balsam fir	ABBA	bunchberry dogwood	COCA13
	black spruce	PIMA	goldthread	COPTI
	green ash	FRPE	woodfern	DRYOP
	red maple	ACRU	wintergreen	GAPR2
	tamarack	LALA	sedge	CAREX
	white spruce	PIGL	American fly	LOCA7
			honeysuckle	
			Canada mayflower	MACA4
			wood sorrel	OXMO
			grasses	POA
			brackenfern	PTERI
			twisted stalk	STAM2
			starflower	TRB02
			blueberry	VACCI
			shining clubmoss	HULU2

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
428C: Gogebic-----	American basswood	TIAM	Maryland sanicle	SAMA2
	eastern hemlock	TSCA	Jack in the pulpit	ARTR
	eastern hophornbeam	OSVI	white baneberry	ACPA
	northern red oak	QURU	wild sarsaparilla	ARNU2
	quaking aspen	POTR5	Canada mayflower	MACA4
	red maple	ACRU	blue cohosh	CATH2
	red pine	PIRE	yellow beadlily	CLBO3
	sugar maple	ACSA3	spinulose shield	DRSP4
	white ash	FRAM2	fern	
	yellow birch	BEAL2	bedstraw	GALIU
			oakfern	GYDR
			sedge	CAREX
			sensitive fern	ONSE
			sweet cicely	OSCL
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			rattlesnake fern	BOVI
			elderberry	SAMBU
			common ladyfern	ATFI
			downy yellow violet	VIPU3
			violet	VIOLA
			twisted stalk	STAM2
Michigamme-----	American elm	ULAM	sweet cicely	OSCL
	bigtooth aspen	POGR4	hairy Solomon's seal	POPU4
	black cherry	PRSE2	red elderberry	SACA11
	eastern hemlock	TSCA	false Solomon's seal	SMILA
	eastern hophornbeam	OSVI	twisted stalk	STAM2
	white ash	FRAM2	American basswood	TIAM
	yellow birch	BEAL2	eastern hophornbeam	OSVI
	American basswood	TIAM	eastern hemlock	TSCA
	quaking aspen	POTR5	Canada white violet	VICA4
	sugar maple	ACSA3	Canada mayflower	MACA4
			bedstraw	GALIU
			trillium	TRILL
			white ash	FRAM2
			spinulose woodfern	DRCA11
			blue cohosh	CATH2
			sedge	CAREX
			rattlesnake fern	BOVI
			yellow birch	BEAL2
			ladyfern	ATHYR
			Jack in the pulpit	ARTR
			sugar maple	ACSA3
			American elm	ULAM
			downy yellow violet	VIPU3
			smooth yellow violet	VIPUP2

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
428D: Gogebic-----	American basswood	TIAM	rattlesnake fern	BOVI
	eastern hemlock	TSCA	common ladyfern	ATFI
	eastern hophornbeam	OSVI	white baneberry	ACPA
	northern red oak	QURU	Jack in the pulpit	ARTR
	quaking aspen	POTR5	wild sarsaparilla	ARNU2
	red maple	ACRU	violet	VIOLA
	red pine	PIRE	twisted stalk	STAM2
	sugar maple	ACSA3	elderberry	SAMBU
	white ash	FRAM2	Maryland sanicle	SAMA2
	yellow birch	BEAL2	red elderberry	SACA11
			hairy Solomon's seal	POPU4
			sweet cicely	OSCL
			sensitive fern	ONSE
			Canada mayflower	MACA4
			oakfern	GYDR
			bedstraw	GALIU
			spinulose shield fern	DRSP4
			downy yellow violet	VIPU3
			sedge	CAREX
			blue cohosh	CATH2
			yellow beadlily	CLBO3
Michigamme-----	American elm	ULAM	ladyfern	ATHYR
	bigtooth aspen	POGR4	yellow birch	BEAL2
	black cherry	PRSE2	rattlesnake fern	BOVI
	eastern hemlock	TSCA	twisted stalk	STAM2
	eastern hophornbeam	OSVI	American basswood	TIAM
	white ash	FRAM2	trillium	TRILL
	yellow birch	BEAL2	Jack in the pulpit	ARTR
	American basswood	TIAM	Canada white violet	VICA4
	quaking aspen	POTR5	downy yellow violet	VIPU3
	sugar maple	ACSA3	sugar maple	ACSA3
			false Solomon's seal	SMILA
			eastern hemlock	TSCA
			red elderberry	SACA11
			hairy Solomon's seal	POPU4
			sweet cicely	OSCL
			Canada mayflower	MACA4
			bedstraw	GALIU
			white ash	FRAM2
			spinulose woodfern	DRCA11
			blue cohosh	CATH2
			sedge	CAREX
			American elm	ULAM
			smooth yellow violet	VIPUP2
			eastern hophornbeam	OSVI

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
429B: Gogebic-----	American basswood	TIAM	Canada mayflower	MACA4
	eastern hemlock	TSCA	sweet cicely	OSCL
	eastern hophornbeam	OSVI	violet	VIOLA
	northern red oak	QURU	yellow beadlelily	CLBO3
	quaking aspen	POTR5	white baneberry	ACPA
	red maple	ACRU	Maryland sanicle	SAMA2
	red pine	PIRE	wild sarsaparilla	ARNU2
	sugar maple	ACSA3	Jack in the pulpit	ARTR
	white ash	FRAM2	rattlesnake fern	BOVI
	yellow birch	BEAL2	sedge	CAREX
			blue cohosh	CATH2
			bedstraw	GALIU
			elderberry	SAMBU
			spinulose shield fern	DRSP4
			oakfern	GYDR
			common ladyfern	ATFI
			sensitive fern	ONSE
			downy yellow violet	VIPU3
Peshekee-----	eastern hemlock	TSCA	blueberry	VACCI
	eastern white pine	PIST	Canada yew	TACA7
	northern red oak	QURU	buffaloberry	SHEPH
	paper birch	BEPA	brackenfern	PTAQ
	quaking aspen	POTRT	wild sarsaparilla	ARNU2
	red maple	ACRU	hawthorn	CRATA
	red pine	PIRE	sedge	CAREX
	sugar maple	ACSA3	bigleaf aster	ASMA2
	yellow birch	BEAL2		
429C: Gogebic-----	American basswood	TIAM	white baneberry	ACPA
	eastern hemlock	TSCA	sedge	CAREX
	eastern hophornbeam	OSVI	rattlesnake fern	BOVI
	northern red oak	QURU	Maryland sanicle	SAMA2
	quaking aspen	POTR5	blue cohosh	CATH2
	red maple	ACRU	wild sarsaparilla	ARNU2
	red pine	PIRE	downy yellow violet	VIPU3
	sugar maple	ACSA3	sensitive fern	ONSE
	white ash	FRAM2	yellow beadlelily	CLBO3
	yellow birch	BEAL2	violet	VIOLA
			sweet cicely	OSCL
			Jack in the pulpit	ARTR
			bedstraw	GALIU
			Canada mayflower	MACA4
			elderberry	SAMBU
			spinulose shield fern	DRSP4
			oakfern	GYDR
			common ladyfern	ATFI
Peshekee-----	eastern hemlock	TSCA	sedge	CAREX
	eastern white pine	PIST	hawthorn	CRATA
	northern red oak	QURU	blueberry	VACCI
	paper birch	BEPA	Canada yew	TACA7
	quaking aspen	POTRT	buffaloberry	SHEPH
	red maple	ACRU	brackenfern	PTAQ
	red pine	PIRE	bigleaf aster	ASMA2
	sugar maple	ACSA3	wild sarsaparilla	ARNU2
	yellow birch	BEAL2		

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
429D: Gogebic-----	American basswood	TIAM	yellow beadlily	CLB03
	eastern hemlock	TSCA	blue cohosh	CATH2
	eastern hophornbeam	OSVI	downy yellow violet	VIPU3
	northern red oak	QURU	violet	VIOLA
	quaking aspen	POTR5	twisted stalk	STAM2
	red maple	ACRU	elderberry	SAMBU
	red pine	PIRE	Maryland sanicle	SAMA2
	sugar maple	ACSA3	red elderberry	SACA11
	white ash	FRAM2	white baneberry	ACPA
	yellow birch	BEAL2	wild sarsaparilla	ARNU2
			Jack in the pulpit	ARTR
			common ladyfern	ATFI
			rattlesnake fern	BOVI
			sedge	CAREX
			hairy Solomon's seal	POPU4
			spinulose shield fern	DRSP4
			bedstraw	GALIU
			oakfern	GYDR
			Canada mayflower	MACA4
			sensitive fern	ONSE
			sweet cicely	OSCL
Peshekee-----	eastern hemlock	TSCA	wild sarsaparilla	ARNU2
	eastern white pine	PIST	blueberry	VACCI
	northern red oak	QURU	Canada yew	TACA7
	paper birch	BEPA	sedge	CAREX
	quaking aspen	POTRT	buffaloberry	SHEPH
	red maple	ACRU	brackenfern	PTAQ
	red pine	PIRE	hawthorn	CRATA
	sugar maple	ACSA3	bigleaf aster	ASMA2
	yellow birch	BEAL2		
429E: Schweitzer-----	American basswood	TIAM	elderberry	SAMBU
	balsam fir	ABBA	starflower	TRIEN
	eastern hemlock	TSCA	sedge	CAREX
	eastern hophornbeam	OSVI	spinulose shield fern	DRSP4
	eastern white pine	PIST		
	northern red oak	QURU	Canada mayflower	MACA4
	quaking aspen	POTR5	hairy Solomon's seal	POPU4
	red maple	ACRU	twisted stalk	STAM2
	sugar maple	ACSA3	downy yellow violet	VIPU3
Peshekee-----	eastern hemlock	TSCA	hawthorn	CRATA
	eastern white pine	PIST	brackenfern	PTAQ
	northern red oak	QURU	buffaloberry	SHEPH
	paper birch	BEPA	Canada yew	TACA7
	quaking aspen	POTRT	blueberry	VACCI
	red maple	ACRU	sedge	CAREX
	red pine	PIRE	wild sarsaparilla	ARNU2
	sugar maple	ACSA3	bigleaf aster	ASMA2
	yellow birch	BEAL2		
430B: Stutts-----	eastern hemlock	TSCA	shining clubmoss	HULU2
	eastern white pine	PIST	barren strawberry	WAFR
	jack pine	PIBA2	beaked hazelnut	COCO6
	northern red oak	QURU	sedge	CAREX
	paper birch	BEPA	starflower	TRBO2
	quaking aspen	POTR5	brackenfern	PTERI
	red pine	PIRE	Canada mayflower	MACA4
	sugar maple	ACSA3		
	yellow birch	BEAL2		

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
430C: Stutts-----	eastern hemlock	TSCA	shining clubmoss	HULU2
	eastern white pine	PIST	barren strawberry	WAFR
	jack pine	PIBA2	beaked hazelnut	COCO6
	northern red oak	QURU	sedge	CAREX
	paper birch	BEPA	starflower	TRBO2
	quaking aspen	POTR5	brackenfern	PTERI
	red pine	PIRE	Canada mayflower	MACA4
	sugar maple	ACSA3		
	yellow birch	BEAL2		
430D: Stutts-----	eastern hemlock	TSCA	shining clubmoss	HULU2
	eastern white pine	PIST	barren strawberry	WAFR
	jack pine	PIBA2	beaked hazelnut	COCO6
	northern red oak	QURU	sedge	CAREX
	paper birch	BEPA	starflower	TRBO2
	quaking aspen	POTR5	brackenfern	PTERI
	red pine	PIRE	Canada mayflower	MACA4
	sugar maple	ACSA3		
	yellow birch	BEAL2		
430E: Stutts-----	eastern hemlock	TSCA	shining clubmoss	HULU2
	eastern white pine	PIST	barren strawberry	WAFR
	jack pine	PIBA2	beaked hazelnut	COCO6
	northern red oak	QURU	sedge	CAREX
	paper birch	BEPA	starflower	TRBO2
	quaking aspen	POTR5	brackenfern	PTERI
	red pine	PIRE	Canada mayflower	MACA4
	sugar maple	ACSA3		
	yellow birch	BEAL2		
432C: Gogebic-----	American basswood	TIAM	white baneberry	ACPA
	eastern hemlock	TSCA	wild sarsaparilla	ARNU2
	eastern hophornbeam	OSVI	Jack in the pulpit	ARTR
	northern red oak	QURU	common ladyfern	ATFI
	quaking aspen	POTR5	rattlesnake fern	BOVI
	red maple	ACRU	sedge	CAREX
	red pine	PIRE	blue cohosh	CATH2
	sugar maple	ACSA3	yellow beadlily	CLBO3
	white ash	FRAM2	spinulose shield	DRSP4
	yellow birch	BEAL2	fern	
			bedstraw	GALIU
			oakfern	GYDR
			Canada mayflower	MACA4
			sensitive fern	ONSE
			sweet cicely	OSCL
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			Maryland sanicle	SAMA2
			elderberry	SAMBU
			twisted stalk	STAM2
			violet	VIOLA
			downy yellow violet	VIPU3

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
432C: Michigamme-----	American basswood	TIAM	trillium	TRILL
	bigtooth aspen	POGR4	rattlesnake fern	BOVI
	eastern hemlock	TSCA	sedge	CAREX
	eastern hophornbeam	OSVI	blue cohosh	CATH2
	eastern white pine	PIST	spinulose shield	DRSP4
	northern red oak	QURU	fern	
	quaking aspen	POTR5	bedstraw	GALIU
	sugar maple	ACSA3	Canada mayflower	MACA4
	yellow birch	BEAL2	sweet cicely	OSCL
			Jack in the pulpit	ARTR
			ladyfern	ATHYR
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			false Solomon's seal	SMILA
			twisted stalk	STAM2
			Canada white violet	VICA4
			downy yellow violet	VIPU3
			smooth yellow violet	VIPUP2
Rock outcrop.				
432D: Gogebic-----	American basswood	TIAM	white baneberry	ACPA
	eastern hemlock	TSCA	wild sarsaparilla	ARNU2
	eastern hophornbeam	OSVI	Jack in the pulpit	ARTR
	northern red oak	QURU	common ladyfern	ATFI
	quaking aspen	POTR5	rattlesnake fern	BOVI
	red maple	ACRU	sedge	CAREX
	red pine	PIRE	blue cohosh	CATH2
	sugar maple	ACSA3	yellow beadlelily	CLBO3
	white ash	FRAM2	spinulose shield	DRSP4
	yellow birch	BEAL2	fern	
			bedstraw	GALIU
			oakfern	GYDR
			Canada mayflower	MACA4
			sensitive fern	ONSE
			sweet cicely	OSCL
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			Maryland sanicle	SAMA2
			elderberry	SAMBU
			twisted stalk	STAM2
			violet	VIOLA
			downy yellow violet	VIPU3
Michigamme-----	American basswood	TIAM	downy yellow violet	VIPU3
	bigtooth aspen	POGR4	Jack in the pulpit	ARTR
	eastern hemlock	TSCA	ladyfern	ATHYR
	eastern hophornbeam	OSVI	rattlesnake fern	BOVI
	eastern white pine	PIST	sedge	CAREX
	northern red oak	QURU	blue cohosh	CATH2
	quaking aspen	POTR5	spinulose shield	DRSP4
	sugar maple	ACSA3	fern	
	yellow birch	BEAL2	bedstraw	GALIU
			Canada mayflower	MACA4
			sweet cicely	OSCL
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			false Solomon's seal	SMILA
			twisted stalk	STAM2
			trillium	TRILL
			Canada white violet	VICA4
			smooth yellow violet	VIPUP2

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
432D: Rock outcrop.				
432E: Schweitzer-----	American basswood	TIAM	elderberry	SAMBU
	balsam fir	ABBA	spinulose shield	DRSP4
	eastern hemlock	TSCA	fern	
	eastern hophornbeam	OSVI	sedge	CAREX
	eastern white pine	PIST	downy yellow violet	VIPU3
	northern red oak	QURU	starflower	TRIEI
	quaking aspen	POTR5	twisted stalk	STAM2
	red maple	ACRU	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	Canada mayflower	MACA4
Michigamme-----	American elm	ULAM	blue cohosh	CATH2
	bigtooth aspen	POGR4	spinulose woodfern	DRCA11
	black cherry	PRSE2	white ash	FRAM2
	eastern hemlock	TSCA	bedstraw	GALIU
	eastern hophornbeam	OSVI	Canada mayflower	MACA4
	white ash	FRAM2	eastern hophornbeam	OSVI
	yellow birch	BEAL2	sweet cicely	OSCL
	American basswood	TIAM	hairy Solomon's seal	POPU4
	quaking aspen	POTR5	red elderberry	SACA11
	sugar maple	ACSA3	false Solomon's seal	SMILA
			trillium	TRILL
			eastern hemlock	TSCA
			American elm	ULAM
			Canada white violet	VICA4
			downy yellow violet	VIPU3
			smooth yellow violet	VIPUP2
			sugar maple	ACSA3
			sedge	CAREX
			rattlesnake fern	BOVI
			yellow birch	BEAL2
			ladyfern	ATHYR
			twisted stalk	STAM2
			Jack in the pulpit	ARTR
			American basswood	TIAM
Rock outcrop.				
432F: Schweitzer-----	American basswood	TIAM	hairy Solomon's seal	POPU4
	balsam fir	ABBA	spinulose shield	DRSP4
	eastern hemlock	TSCA	fern	
	eastern hophornbeam	OSVI	sedge	CAREX
	eastern white pine	PIST	downy yellow violet	VIPU3
	northern red oak	QURU	starflower	TRIEI
	quaking aspen	POTR5	twisted stalk	STAM2
	red maple	ACRU	elderberry	SAMBU
	sugar maple	ACSA3	Canada mayflower	MACA4

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
432F: Michigamme-----	American elm	ULAM	spinulose woodfern	DRCA11
	bigtooth aspen	POGR4	white ash	FRAM2
	black cherry	PRSE2	bedstraw	GALIU
	eastern hemlock	TSCA	Canada mayflower	MACA4
	eastern hophornbeam	OSVI	eastern hophornbeam	OSVI
	white ash	FRAM2	sweet cicely	OSCL
	yellow birch	BEAL2	hairy Solomon's seal	POPU4
	American basswood	TIAM	red elderberry	SACA11
	quaking aspen	POTR5	blue cohosh	CATH2
	sugar maple	ACSA3	American basswood	TIAM
			trillium	TRILL
			eastern hemlock	TSCA
			American elm	ULAM
			Canada white violet	VICA4
			downy yellow violet	VIPU3
			smooth yellow violet	VIPUP2
			false Solomon's seal	SMILA
			sedge	CAREX
			rattlesnake fern	BOVI
			yellow birch	BEAL2
			ladyfern	ATHYR
			Jack in the pulpit	ARTR
			twisted stalk	STAM2
			sugar maple	ACSA3
Rock outcrop.				
433B: McMillan-----	American basswood	TIAM	ladyfern	ATFI
	bigtooth aspen	POGR4	sedge	CAREX
	eastern hemlock	TSCA	spinulose shield	DRSP4
	eastern hophornbeam	OSVI	fern	
	quaking aspen	POTR5	elderberry	SAMBU
	red maple	ACRU	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	red elderberry	SACA11
	yellow birch	BEAL2	twisted stalk	STAM2
			sweet cicely	OSCL
			oakfern	GYDR
			trillium	TRILL
			blue cohosh	CATH2
			wild sarsaparilla	ARNU2
			bloodroot	SACA13
433C: McMillan-----	American basswood	TIAM	ladyfern	ATFI
	bigtooth aspen	POGR4	sedge	CAREX
	eastern hemlock	TSCA	spinulose shield	DRSP4
	eastern hophornbeam	OSVI	fern	
	quaking aspen	POTR5	elderberry	SAMBU
	red maple	ACRU	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	red elderberry	SACA11
	yellow birch	BEAL2	twisted stalk	STAM2
			sweet cicely	OSCL
			oakfern	GYDR
			trillium	TRILL
			blue cohosh	CATH2
			wild sarsaparilla	ARNU2
			bloodroot	SACA13

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
433D:				
McMillan-----	American basswood	TIAM	ladyfern	ATFI
	bigtooth aspen	POGR4	sedge	CAREX
	eastern hemlock	TSCA	spinulose shield	DRSP4
	eastern hophornbeam	OSVI	fern	
	quaking aspen	POTR5	elderberry	SAMBU
	red maple	ACRU	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	red elderberry	SACA11
	yellow birch	BEAL2	twisted stalk	STAM2
			sweet cicely	OSCL
			oakfern	GYDR
			trillium	TRILL
			blue cohosh	CATH2
			wild sarsaparilla	ARNU2
			bloodroot	SACA13
435C:				
Kalkaska-----	bigtooth aspen	POGR4	spinulose shield	DRSP4
	eastern white pine	PIST	fern	
	northern red oak	QURU	Canada mayflower	MACA4
	paper birch	BEPA	starflower	TRBO2
	quaking aspen	POTR5	elderberry	SAMBU
	red maple	ACRU	sedge	CAREX
	red pine	PIRE	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	twisted stalk	STAM2
Waiska-----	American basswood	TIAM	bedstraw	GALIU
	quaking aspen	POTR5	Canada mayflower	MACA4
	red pine	PIRE	eastern hophornbeam	OSVI
	sugar maple	ACSA3	sweet cicely	OSCL
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			ladyfern	ATHYR
			twisted stalk	STAM2
			white ash	FRAM2
			trillium	TRILL
			eastern hemlock	TSCA
			American elm	ULAM
			Canada white violet	VICA4
			downy yellow violet	VIPU3
			smooth yellow violet	VIPUP2
			sugar maple	ACSA3
			Jack in the pulpit	ARTR
			rattlesnake fern	BOVI
			spinulose woodfern	DRCA11
			blue cohosh	CATH2
			sedge	CAREX
			yellow birch	BEAL2
			false Solomon's seal	SMILA
			American basswood	TIAM
435D:				
Kalkaska-----	bigtooth aspen	POGR4	starflower	TRBO2
	eastern white pine	PIST	elderberry	SAMBU
	northern red oak	QURU	sedge	CAREX
	paper birch	BEPA	hairy Solomon's seal	POPU4
	quaking aspen	POTR5	twisted stalk	STAM2
	red maple	ACRU	spinulose shield	DRSP4
	red pine	PIRE	fern	
	sugar maple	ACSA3	Canada mayflower	MACA4

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
435D: Waiska-----	American basswood	TIAM	sedge	CAREX
	quaking aspen	POTR5	blue cohosh	CATH2
	red pine	PIRE	spinulose woodfern	DRCA11
	sugar maple	ACSA3	white ash	FRAM2
			bedstraw	GALIU
			Canada mayflower	MACA4
			sweet cicely	OSCL
			hairy Solomon's seal	POPU4
			eastern hophornbeam	OSVI
			twisted stalk	STAM2
			American basswood	TIAM
			trillium	TRILL
			red elderberry	SACA11
			American elm	ULAM
			Canada white violet	VICA4
			downy yellow violet	VIPU3
			smooth yellow violet	VIPUP2
			rattlesnake fern	BOVI
			yellow birch	BEAL2
			ladyfern	ATHYR
			Jack in the pulpit	ARTR
			false Solomon's seal	SMILA
			sugar maple	ACSA3
			eastern hemlock	TSCA
435E: Kalkaska-----	bigtooth aspen	POGR4	twisted stalk	STAM2
	eastern white pine	PIST	hairy Solomon's seal	POPU4
	northern red oak	QURU	sedge	CAREX
	paper birch	BEP4	elderberry	SAMBU
	quaking aspen	POTR5	starflower	TRBO2
	red maple	ACRU	spinulose shield	DRSP4
	red pine	PIRE	fern	
	sugar maple	ACSA3	Canada mayflower	MACA4
Waiska-----	American basswood	TIAM	downy yellow violet	VIPU3
	quaking aspen	POTR5	hairy Solomon's seal	POPU4
	red pine	PIRE	red elderberry	SACA11
	sugar maple	ACSA3	sugar maple	ACSA3
			Jack in the pulpit	ARTR
			ladyfern	ATHYR
			yellow birch	BEAL2
			rattlesnake fern	BOVI
			sedge	CAREX
			blue cohosh	CATH2
			spinulose woodfern	DRCA11
			white ash	FRAM2
			bedstraw	GALIU
			Canada mayflower	MACA4
			smooth yellow violet	VIPUP2
			eastern hophornbeam	OSVI
			Canada white violet	VICA4
			American elm	ULAM
			eastern hemlock	TSCA
			trillium	TRILL
			American basswood	TIAM
			twisted stalk	STAM2
			false Solomon's seal	SMILA
			sweet cicely	OSCL

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
437B:				
Manitowish-----	eastern hemlock	TSCA	velvetleaf	VAMY
	eastern white pine	PIST	huckleberry	
	quaking aspen	POTR5	twisted stalk	STAM2
	red maple	ACRU	brackenfern	PTAQ
	red pine	PIRE	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	bunchberry dogwood	COCA13
			bigleaf aster	ASMA2
			Canada mayflower	MACA4
Channing-----	American basswood	TIAM	twisted stalk	STAM2
	northern red oak	QURU	red elderberry	SACA11
	quaking aspen	POTR5	hairy Solomon's seal	POPU4
	red pine	PIRE	Canada mayflower	MACA4
	sugar maple	ACSA3	jewelweed	IMCA
			spinulose woodfern	DRCA11
			American basswood	TIAM
			ladyfern	ATHYR
			yellow birch	BEAL2
			American elm	ULAM
			eastern hemlock	TSCA
			sugar maple	ACSA3
			red maple	ACRU
			sedge	CAREX
			small enchanter's nightshade	CIAL
448F:				
Rockland-----	balsam fir	ABBA	spinulose shield	DRSP4
	eastern hemlock	TSCA	fern	
	eastern white pine	PIST	American fly	LOCA7
	green ash	FRPE	honeysuckle	
	quaking aspen	POTR5	twisted stalk	STAM2
	sugar maple	ACSA3	trillium	TRILL
	white spruce	PIGL	sedge	CAREX
			horsetail	EQUIS
			partridgeberry	MIRE
			yellow beadlelily	CLBO3
			large leaved aster	ASMA2
			American starflower	TRBO2
			white baneberry	ACPA
			wild sarsaparilla	ARNU2
			ladyfern	ATFI
			long beech fern	THPH
Rock outcrop.				
449C:				
Flintsteel-----	American basswood	TIAM	downy yellow violet	VIPU3
	balsam fir	ABBA	violet	VIOLA
	basswood	TILIA	yellow beadlelily	CLBO3
	eastern hemlock	TSCA	dutchman's breeches	DICU
	eastern hophornbeam	OSVI	American fly	LOCA7
	green ash	FRPE	honeysuckle	
	northern whitecedar	THOC2	sedge	CAREX
	quaking aspen	POTR5	spinulose shield	DRSP4
	red maple	ACRU	fern	
	sugar maple	ACSA3	false Solomon's seal	SMILA
	white ash	FRAM2	hairy Solomon's seal	POPU4
	yellow birch	BEAL2	Canada mayflower	MACA4
			trillium	TRILL
			wild leek	ALTR3

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
449C:				
Minocqua-----	balsam fir	ABBA	balsam fir	ABBA
	balsam poplar	POBA2	American fly	LOCA7
	bigtooth aspen	POGR4	honeysuckle	
	black ash	FRNI	Canada mayflower	MACA4
	black spruce	PIMA	wood sorrel	OXMO
	eastern hemlock	TSCA	white spruce	PIGL
	northern whitecedar	THOC2	woodfern	DRYOP
	paper birch	BEPA	northern whitecedar	THOC2
	quaking aspen	POTR5	starflower	TRBO2
	red maple	ACRU	eastern hemlock	TSCA
	sugar maple	ACSA3	blueberry	VACCI
	white spruce	PIGL	goldthread	COPTI
	yellow birch	BEAL2	bunchberry dogwood	COCA13
			grasses	POA
			yellow beادلily	CLBO3
			sedge	CAREX
			yellow birch	BEAL2
			sugar maple	ACSA3
			brackenfern	PTERI
			red maple	ACRU
			twisted stalk	STAM2
			shining clubmoss	HULU2
			wintergreen	GAPR2
452F:				
Rockland-----	balsam fir	ABBA	spinulose shield	DRSP4
	eastern hemlock	TSCA	fern	
	eastern white pine	PIST	American fly	LOCA7
	green ash	FRPE	honeysuckle	
	quaking aspen	POTR5	twisted stalk	STAM2
	sugar maple	ACSA3	trillium	TRILL
	white spruce	PIGL	sedge	CAREX
			horsetail	EQUIS
			partridgeberry	MIRE
			yellow beادلily	CLBO3
			large leaved aster	ASMA2
			American starflower	TRBO2
			white baneberry	ACPA
			wild sarsaparilla	ARNU2
			ladyfern	ATFI
			long beech fern	THPH
460B:				
Belding-----	balsam fir	ABBA	spinulose shield	DRSP4
	northern red oak	QURU	fern	
	paper birch	BEPA	Canada mayflower	MACA4
	quaking aspen	POTR5	bunchberry dogwood	COCA13
	red pine	PIRE	goldthread	COPTI
	sugar maple	ACSA3	sedge	CAREX
	yellow birch	BEAL2	yellow beادلily	CLBO3
			starflower	TRBO2
			woodsorrel	OXALI
Manido-----	balsam fir	ABBA	wild sarsaparilla	ARNU2
	eastern hemlock	TSCA	yellow beادلily	CLBO3
	red maple	ACRU	spinulose shield	DRSP4
	sugar maple	ACSA3	fern	
	white spruce	PIGL	Canada mayflower	MACA4
	yellow birch	BEAL2	brackenfern	PTERI
			raspberry	RUIDI
			starflower	TRBO2
			bunchberry dogwood	COCA13

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
461B: Loggerhead-----	American basswood	TIAM	spinulose shield	DRSP4
	balsam fir	ABBA	fern	
	eastern hemlock	TSCA	sedge	CAREX
	green ash	FRPE	shining clubmoss	HULU2
	quaking aspen	POTR5	goldthread	COPTI
	red maple	ACRU	American fly	LOCA7
	sugar maple	ACSA3	honeysuckle	
	yellow birch	BEAL2	violet	VIOLA
462C: Nonesuch-----	bigtooth aspen	POGR4	Canada mayflower	MACA4
	black cherry	PRSE2	brackenfern	PTERI
	eastern white pine	PIST	wild sarsaparilla	ARNU2
	green ash	FRPE	large leaved aster	ASMA2
	quaking aspen	POTR5	beaked hazelnut	COCO6
	red maple	ACRU	spinulose shield	DRSP4
	sugar maple	ACSA3	fern	
			thimbleberry	RUPA
Rock outcrop.				
509: Cathro-----	balsam fir	ABBA	sphagnum moss	SPHAG*
	black ash	FRNI	northern dewberry	RUFL
	northern whitecedar	THOC2	common ladyfern	ATFI
	paper birch	BEPa	naked miterwort	MINU3
	red maple	ACRU	woodsorrel	OXALI
	tamarack	LALA	goldthread	COPTI
	white spruce	PIGL	bedstraw	GALIU
			rattlesnake fern	BOVI
			American starflower	TRBO2
			sedge	CAREX
			spinulose shield	DRSP4
			fern	
Minocqua-----	balsam fir	ABBA	Canada mayflower	MACA4
	balsam poplar	POBA2	American fly	LOCA7
	bigtooth aspen	POGR4	honeysuckle	
	black ash	FRNI	shining clubmoss	HULU2
	black spruce	PIMA	wintergreen	GAPR2
	eastern hemlock	TSCA	woodfern	DRYOP
	northern whitecedar	THOC2	goldthread	COPTI
	paper birch	BEPa	wood sorrel	OXMO
	quaking aspen	POTR5	yellow beadlelily	CLBO3
	red maple	ACRU	sedge	CAREX
	sugar maple	ACSA3	yellow birch	BEAL2
	white spruce	PIGL	sugar maple	ACSA3
	yellow birch	BEAL2	red maple	ACRU
			balsam fir	ABBA
			white spruce	PIGL
			grasses	POA
			bunchberry dogwood	COCA13
			brackenfern	PTERI
			twisted stalk	STAM2
			northern whitecedar	THOC2
			starflower	TRBO2
			eastern hemlock	TSCA
			blueberry	VACCI

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
511A:				
Gogebic-----	American basswood	TIAM	white baneberry	ACPA
	eastern hemlock	TSCA	Maryland sanicle	SAMA2
	eastern hophornbeam	OSVI	downy yellow violet	VIPU3
	northern red oak	QURU	sensitive fern	ONSE
	quaking aspen	POTR5	sweet cicely	OSCL
	red maple	ACRU	wild sarsaparilla	ARNU2
	red pine	PIRE	common ladyfern	ATFI
	sugar maple	ACSA3	oakfern	GYDR
	white ash	FRAM2	spinulose shield	DRSP4
	yellow birch	BEAL2	fern	
			elderberry	SAMBU
			Canada mayflower	MACA4
			bedstraw	GALIU
			violet	VIOLA
			Jack in the pulpit	ARTR
			rattlesnake fern	BOVI
			yellow beadleily	CLBO3
			sedge	CAREX
			blue cohosh	CATH2
Tula-----	balsam fir	ABBA	oakfern	GYDR
	eastern hemlock	TSCA	wintergreen	GAPR2
	eastern white pine	PIST	spinulose shield	DRSP4
	quaking aspen	POTRT	fern	
	red maple	ACRU	goldthread	COPTI
	sugar maple	ACSA3	bunchberry dogwood	COCA13
			yellow beadleily	CLBO3
			shining clubmoss	HULU2
			American fly	LOCA7
			honeysuckle	
			Canada mayflower	MACA4
			twisted stalk	STAM2
			wood sorrel	OXMO
			wild sarsaparilla	ARNU2
			sedge	CAREX
			hairy Solomon's seal	POPU4
			American starflower	TRBO2
Chabeneau-----	American basswood	TIAM	blue cohosh	CATH2
	quaking aspen	POTR5	Jack in the pulpit	ARTR
	red pine	PIRE	sugar maple	ACSA3
	sugar maple	ACSA3	smooth yellow violet	VIPUP2
			downy yellow violet	VIPU3
			Canada white violet	VICA4
			American elm	ULAM
			eastern hemlock	TSCA
			trillium	TRILL
			American basswood	TIAM
			twisted stalk	STAM2
			false Solomon's seal	SMILA
			red elderberry	SACA11
			hairy Solomon's seal	POPU4
			sedge	CAREX
			rattlesnake fern	BOVI
			yellow birch	BEAL2
			ladyfern	ATHYR
			spinulose woodfern	DRCA11
			white ash	FRAM2
			bedstraw	GALIU
			Canada mayflower	MACA4
			eastern hophornbeam	OSVI
			sweet cicely	OSCL

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
519B: Gogebic-----	American basswood	TIAM	blue cohosh	CATH2
	eastern hemlock	TSCA	sedge	CAREX
	eastern hophornbeam	OSVI	bedstraw	GALIU
	northern red oak	QURU	Canada mayflower	MACA4
	quaking aspen	POTR5	elderberry	SAMBU
	red maple	ACRU	yellow beadlely	CLBO3
	red pine	PIRE	spinulose shield	DRSP4
	sugar maple	ACSA3	fern	
	white ash	FRAM2	oakfern	GYDR
	yellow birch	BEAL2	common ladyfern	ATFI
			sensitive fern	ONSE
			wild sarsaparilla	ARNU2
			Maryland sanicle	SAMA2
			Jack in the pulpit	ARTR
			white baneberry	ACPA
			sweet cicely	OSCL
			violet	VIOLA
			rattlesnake fern	BOVI
			downy yellow violet	VIPU3
Karlin-----	American basswood	TIAM	smooth yellow violet	VIPUP2
	eastern hophornbeam	OSVI	downy yellow violet	VIPU3
	quaking aspen	POTR5	Canada white violet	VICA4
	red pine	PIRE	trillium	TRILL
	sugar maple	ACSA3	twisted stalk	STAM2
	white ash	FRAM2	false Solomon's seal	SMILA
	yellow birch	BEAL2	hairy Solomon's seal	POPU4
			sweet cicely	OSCL
			Canada mayflower	MACA4
			spinulose shield	DRSP4
			fern	
			blue cohosh	CATH2
			sedge	CAREX
			rattlesnake fern	BOVI
			ladyfern	ATHYR
			Jack in the pulpit	ARTR
			red elderberry	SACA11
			bedstraw	GALIU
519C: Gogebic-----	American basswood	TIAM	rattlesnake fern	BOVI
	eastern hemlock	TSCA	Jack in the pulpit	ARTR
	eastern hophornbeam	OSVI	yellow beadlely	CLBO3
	northern red oak	QURU	white baneberry	ACPA
	quaking aspen	POTR5	sedge	CAREX
	red maple	ACRU	blue cohosh	CATH2
	red pine	PIRE	bedstraw	GALIU
	sugar maple	ACSA3	Canada mayflower	MACA4
	white ash	FRAM2	elderberry	SAMBU
	yellow birch	BEAL2	sensitive fern	ONSE
			sweet cicely	OSCL
			violet	VIOLA
			Maryland sanicle	SAMA2
			wild sarsaparilla	ARNU2
			downy yellow violet	VIPU3
			common ladyfern	ATFI
			oakfern	GYDR
			spinulose shield	DRSP4
			fern	

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Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
519C: Karlin-----	American basswood	TIAM	trillium	TRILL
	eastern hophornbeam	OSVI	American basswood	TIAM
	quaking aspen	POTR5	ladyfern	ATHYR
	red pine	PIRE	eastern hemlock	TSCA
	sugar maple	ACSA3	American elm	ULAM
	white ash	FRAM2	Canada white violet	VICA4
	yellow birch	BEAL2	Jack in the pulpit	ARTR
			downy yellow violet	VIPU3
			smooth yellow violet	VIPUP2
			sedge	CAREX
			rattlesnake fern	BOVI
			blue cohosh	CATH2
			spinulose shield fern	DRSP4
			bedstraw	GALIU
			Canada mayflower	MACA4
			sweet cicely	OSCL
			twisted stalk	STAM2
			false Solomon's seal	SMILA
			red elderberry	SACA11
			hairy Solomon's seal	POPU4
519D: Gogebic-----	American basswood	TIAM	white baneberry	ACPA
	eastern hemlock	TSCA	Maryland sanicle	SAMA2
	eastern hophornbeam	OSVI	wild sarsaparilla	ARNU2
	northern red oak	QURU	downy yellow violet	VIPU3
	quaking aspen	POTR5	sensitive fern	ONSE
	red maple	ACRU	common ladyfern	ATFI
	red pine	PIRE	yellow beadlelily	CLBO3
	sugar maple	ACSA3	spinulose shield	DRSP4
	white ash	FRAM2	fern	
	yellow birch	BEAL2	elderberry	SAMBU
			violet	VIOLA
			sweet cicely	OSCL
			rattlesnake fern	BOVI
			Jack in the pulpit	ARTR
			bedstraw	GALIU
			blue cohosh	CATH2
			sedge	CAREX
			oakfern	GYDR
			Canada mayflower	MACA4

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Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
519D: Karlin-----	American basswood	TIAM	sugar maple	ACSA3
	quaking aspen	POTR5	Jack in the pulpit	ARTR
	red pine	PIRE	ladyfern	ATHYR
	sugar maple	ACSA3	yellow birch	BEAL2
			rattlesnake fern	BOVI
			sedge	CAREX
			blue cohosh	CATH2
			spinulose woodfern	DRCA11
			white ash	FRAM2
			bedstraw	GALIU
			Canada mayflower	MACA4
			eastern hophornbeam	OSVI
			sweet cicely	OSCL
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			false Solomon's seal	SMILA
			twisted stalk	STAM2
			American basswood	TIAM
			trillium	TRILL
			eastern hemlock	TSCA
			American elm	ULAM
			Canada white violet	VICA4
			downy yellow violet	VIPU3
			smooth yellow violet	VIPUP2
522. Pits, sand and gravel				
523D: Gogebic, sandy substratum-----	American basswood	TIAM	downy yellow violet	VIPU3
	eastern hemlock	TSCA	violet	VIOLA
	eastern hophornbeam	OSVI	elderberry	SAMBU
	northern red oak	QURU	Maryland sanicle	SAMA2
	quaking aspen	POTR5	sweet cicely	OSCL
	red maple	ACRU	sensitive fern	ONSE
	red pine	PIRE	Canada mayflower	MACA4
	sugar maple	ACSA3	oakfern	GYDR
	white ash	FRAM2	bedstraw	GALIU
	yellow birch	BEAL2	spinulose shield fern	DRSP4
			yellow beادلily	CLBO3
			blue cohosh	CATH2
			sedge	CAREX
			rattlesnake fern	BOVI
			wild sarsaparilla	ARNU2
			white baneberry	ACPA
			common ladyfern	ATFI
			Jack in the pulpit	ARTR

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
523D:				
Karlin-----	American basswood	TIAM	smooth yellow violet	VIPUP2
	quaking aspen	POTR5	downy yellow violet	VIPU3
	red pine	PIRE	Canada white violet	VICA4
	sugar maple	ACSA3	American elm	ULAM
			eastern hemlock	TSCA
			trillium	TRILL
			American basswood	TIAM
			twisted stalk	STAM2
			false Solomon's seal	SMILA
			red elderberry	SACA11
			hairy Solomon's seal	POPU4
			sweet cicely	OSCL
			eastern hophornbeam	OSVI
			Canada mayflower	MACA4
			bedstraw	GALIU
			white ash	FRAM2
			spinulose woodfern	DRCA11
			blue cohosh	CATH2
			sedge	CAREX
			rattlesnake fern	BOVI
			yellow birch	BEAL2
			ladyfern	ATHYR
			Jack in the pulpit	ARTR
			sugar maple	ACSA3
524C:				
Waiska-----	American basswood	TIAM	American elm	ULAM
	northern red oak	QURU	eastern hemlock	TSCA
	quaking aspen	POTR5	American basswood	TIAM
	red pine	PIRE	twisted stalk	STAM2
	sugar maple	ACSA3	red elderberry	SACA11
			hairy Solomon's seal	POPU4
			Canada mayflower	MACA4
			spinulose woodfern	DRCA11
			sedge	CAREX
			yellow birch	BEAL2
			ladyfern	ATHYR
			sugar maple	ACSA3
			red maple	ACRU
Amasa-----	American basswood	TIAM	red maple	ACRU
	bigtooth aspen	POGR4	sugar maple	ACSA3
	black cherry	PRSE2	ladyfern	ATHYR
	eastern hemlock	TSCA	sedge	CAREX
	quaking aspen	POTR5	spinulose woodfern	DRCA11
	red maple	ACRU	Canada mayflower	MACA4
	sugar maple	ACSA3	hairy Solomon's seal	POPU4
	yellow birch	BEAL2	red elderberry	SACA11
			twisted stalk	STAM2
			yellow birch	BEAL2
			eastern hemlock	TSCA
			American elm	ULAM
			American basswood	TIAM

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
524D:				
Waiska-----	American basswood	TIAM	sugar maple	ACSA3
	northern red oak	QURU	ladyfern	ATHYR
	quaking aspen	POTR5	yellow birch	BEAL2
	red pine	PIRE	sedge	CAREX
	sugar maple	ACSA3	spinulose woodfern	DRCA11
			Canada mayflower	MACA4
			red maple	ACRU
			red elderberry	SACA11
			twisted stalk	STAM2
			American basswood	TIAM
			eastern hemlock	TSCA
			American elm	ULAM
			hairy Solomon's seal	POPU4
Amasa-----	American basswood	TIAM	sugar maple	ACSA3
	bigtooth aspen	POGR4	ladyfern	ATHYR
	black cherry	PRSE2	yellow birch	BEAL2
	eastern hemlock	TSCA	sedge	CAREX
	quaking aspen	POTR5	spinulose woodfern	DRCA11
	red maple	ACRU	Canada mayflower	MACA4
	sugar maple	ACSA3	hairy Solomon's seal	POPU4
	yellow birch	BEAL2	red elderberry	SACA11
			twisted stalk	STAM2
			American basswood	TIAM
			eastern hemlock	TSCA
			American elm	ULAM
			red maple	ACRU
524E:				
Waiska-----	American basswood	TIAM	hairy Solomon's seal	POPU4
	northern red oak	QURU	American elm	ULAM
	quaking aspen	POTR5	eastern hemlock	TSCA
	red pine	PIRE	Canada mayflower	MACA4
	sugar maple	ACSA3	American basswood	TIAM
			red elderberry	SACA11
			twisted stalk	STAM2
			spinulose woodfern	DRCA11
			red maple	ACRU
			sedge	CAREX
			yellow birch	BEAL2
			sugar maple	ACSA3
			ladyfern	ATHYR
Amasa-----	American basswood	TIAM	ladyfern	ATHYR
	bigtooth aspen	POGR4	yellow birch	BEAL2
	black cherry	PRSE2	sedge	CAREX
	eastern hemlock	TSCA	spinulose woodfern	DRCA11
	quaking aspen	POTR5	Canada mayflower	MACA4
	red maple	ACRU	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	sugar maple	ACSA3
	yellow birch	BEAL2	American basswood	TIAM
			eastern hemlock	TSCA
			American elm	ULAM
			twisted stalk	STAM2
			red elderberry	SACA11
			red maple	ACRU

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
527B: Wakefield-----	American basswood	TIAM	blue cohosh	CATH2
	balsam fir	ABBA	bedstraw	GALIU
	eastern hemlock	TSCA	Canada mayflower	MACA4
	eastern white pine	PIST	spinulose shield	DRSP4
	northern red oak	QURU	fern	
	quaking aspen	POTR5	sedge	CAREX
	red pine	PIRE	Jack in the pulpit	ARTR
	sugar maple	ACSA3	rattlesnake fern	BOVI
	yellow birch	BEAL2	ladyfern	ATHYR
527C: Wakefield-----	American basswood	TIAM	Jack in the pulpit	ARTR
	northern red oak	QURU	ladyfern	ATHYR
	quaking aspen	POTR5	yellow birch	BEAL2
	red pine	PIRE	sedge	CAREX
	sugar maple	ACSA3	sugar maple	ACSA3
			spinulose woodfern	DRCA11
			bedstraw	GALIU
			Canada mayflower	MACA4
			eastern hophornbeam	OSVI
			white ash	FRAM2
			blue cohosh	CATH2
			rattlesnake fern	BOVI
527D: Wakefield-----	American basswood	TIAM	sedge	CAREX
	northern red oak	QURU	blue cohosh	CATH2
	quaking aspen	POTR5	spinulose woodfern	DRCA11
	red pine	PIRE	white ash	FRAM2
	sugar maple	ACSA3	bedstraw	GALIU
			Canada mayflower	MACA4
			rattlesnake fern	BOVI
			yellow birch	BEAL2
			ladyfern	ATHYR
			Jack in the pulpit	ARTR
			sugar maple	ACSA3
			eastern hophornbeam	OSVI
528B: Gogebic-----	American basswood	TIAM	wild sarsaparilla	ARNU2
	eastern hemlock	TSCA	red elderberry	SACA11
	eastern hophornbeam	OSVI	downy yellow violet	VIPU3
	northern red oak	QURU	violet	VIOLA
	quaking aspen	POTR5	elderberry	SAMBU
	red maple	ACRU	Maryland sanicle	SAMA2
	red pine	PIRE	sweet cicely	OSCL
	sugar maple	ACSA3	sensitive fern	ONSE
	white ash	FRAM2	Canada mayflower	MACA4
	yellow birch	BEAL2	oakfern	GYDR
			bedstraw	GALIU
			spinulose shield	DRSP4
			fern	
			yellow beadrily	CLBO3
			blue cohosh	CATH2
			sedge	CAREX
			rattlesnake fern	BOVI
			common ladyfern	ATFI
			Jack in the pulpit	ARTR
			white baneberry	ACPA
			twisted stalk	STAM2
			hairy Solomon's seal	POPU4

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
528B: Annalake-----	American elm	ULAM	smooth yellow violet	VIPUP2
	bigtooth aspen	POGR4	downy yellow violet	VIPU3
	black cherry	PRSE2	Canada white violet	VICA4
	eastern hemlock	TSCA	American elm	ULAM
	eastern hophornbeam	OSVI	eastern hemlock	TSCA
	white ash	FRAM2	trillium	TRILL
	yellow birch	BEAL2	American basswood	TIAM
	American basswood	TIAM	twisted stalk	STAM2
	quaking aspen	POTR5	false Solomon's seal	SMILA
	sugar maple	ACSA3	red elderberry	SACA11
			hairy Solomon's seal	POPU4
			sweet cicely	OSCL
			eastern hophornbeam	OSVI
			Canada mayflower	MACA4
			bedstraw	GALIU
			white ash	FRAM2
			spinulose woodfern	DRCA11
			blue cohosh	CATH2
			sedge	CAREX
			rattlesnake fern	BOVI
			yellow birch	BEAL2
			ladyfern	ATHYR
			Jack in the pulpit	ARTR
			sugar maple	ACSA3
528C: Gogebic-----	American basswood	TIAM	sedge	CAREX
	eastern hemlock	TSCA	Canada mayflower	MACA4
	eastern hophornbeam	OSVI	hairy Solomon's seal	POPU4
	northern red oak	QURU	red elderberry	SACA11
	quaking aspen	POTR5	twisted stalk	STAM2
	red maple	ACRU	white baneberry	ACPA
	red pine	PIRE	wild sarsaparilla	ARNU2
	sugar maple	ACSA3	Jack in the pulpit	ARTR
	white ash	FRAM2	common ladyfern	ATFI
	yellow birch	BEAL2	rattlesnake fern	BOVI
			blue cohosh	CATH2
			yellow beadlelily	CLBO3
			spinulose shield	DRSP4
			fern	
			bedstraw	GALIU
			oakfern	GYDR
			sensitive fern	ONSE
			sweet cicely	OSCL
			Maryland sanicle	SAMA2
			elderberry	SAMBU
			violet	VIOLA
			downy yellow violet	VIPU3

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
528C: Annalake-----	American elm	ULAM	ladyfern	ATHYR
	bigtooth aspen	POGR4	Canada white violet	VICA4
	black cherry	PRSE2	trillium	TRILL
	eastern hemlock	TSCA	American basswood	TIAM
	eastern hophornbeam	OSVI	bedstraw	GALIU
	white ash	FRAM2	white ash	FRAM2
	yellow birch	BEAL2	spinulose woodfern	DRCA11
	American basswood	TIAM	blue cohosh	CATH2
	quaking aspen	POTR5	sedge	CAREX
	sugar maple	ACSA3	rattlesnake fern	BOVI
			yellow birch	BEAL2
			downy yellow violet	VIPU3
			Jack in the pulpit	ARTR
			sugar maple	ACSA3
			American elm	ULAM
			smooth yellow violet	VIPUP2
			twisted stalk	STAM2
			eastern hemlock	TSCA
			false Solomon's seal	SMILA
			red elderberry	SACA11
			hairy Solomon's seal	POPU4
			sweet cicely	OSCL
			eastern hophornbeam	OSVI
			Canada mayflower	MACA4
528D: Gogebic-----	American basswood	TIAM	Jack in the pulpit	ARTR
	eastern hemlock	TSCA	wild sarsaparilla	ARNU2
	eastern hophornbeam	OSVI	white baneberry	ACPA
	green ash	FRPE	Canada mayflower	MACA4
	northern red oak	QURU	rattlesnake fern	BOVI
	quaking aspen	POTR5	common ladyfern	ATFI
	red maple	ACRU	sedge	CAREX
	red pine	PIRE	sensitive fern	ONSE
	sugar maple	ACSA3	blue cohosh	CATH2
	yellow birch	BEAL2	yellow beadlelily	CLBO3
			spinulose shield	DRSP4
			fern	
			bedstraw	GALIU
			downy yellow violet	VIPU3
			violet	VIOLA
			elderberry	SAMBU
			Maryland sanicle	SAMA2
			sweet cicely	OSCL
			oakfern	GYDR

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
528D:				
Annalake-----	American elm	ULAM	American basswood	TIAM
	bigtooth aspen	POGR4	twisted stalk	STAM2
	black cherry	PRSE2	red elderberry	SACA11
	eastern hemlock	TSCA	hairy Solomon's seal	POPU4
	eastern hophornbeam	OSVI	eastern hemlock	TSCA
	white ash	FRAM2	American elm	ULAM
	yellow birch	BEAL2	Canada white violet	VICA4
	American basswood	TIAM	downy yellow violet	VIPU3
	quaking aspen	POTR5	smooth yellow violet	VIPUP2
	sugar maple	ACSA3	sweet cicely	OSCL
			false Solomon's seal	SMILA
			trillium	TRILL
			Canada mayflower	MACA4
			bedstraw	GALIU
			white ash	FRAM2
			spinulose woodfern	DRCA11
			blue cohosh	CATH2
			sedge	CAREX
			rattlesnake fern	BOVI
			yellow birch	BEAL2
			ladyfern	ATHYR
			eastern hophornbeam	OSVI
			Jack in the pulpit	ARTR
			sugar maple	ACSA3
551B:				
Gogebic-----	American basswood	TIAM	oakfern	GYDR
	eastern hemlock	TSCA	Canada mayflower	MACA4
	eastern hophornbeam	OSVI	sensitive fern	ONSE
	northern red oak	QURU	sweet cicely	OSCL
	quaking aspen	POTR5	hairy Solomon's seal	POPU4
	red maple	ACRU	bedstraw	GALIU
	red pine	PIRE	Maryland sanicle	SAMA2
	sugar maple	ACSA3	elderberry	SAMBU
	white ash	FRAM2	twisted stalk	STAM2
	yellow birch	BEAL2	violet	VIOLA
			downy yellow violet	VIPU3
			spinulose shield	DRSP4
			fern	
			yellow beadlelily	CLBO3
			red elderberry	SACA11
			blue cohosh	CATH2
			sedge	CAREX
			rattlesnake fern	BOVI
			common ladyfern	ATFI
			Jack in the pulpit	ARTR
			wild sarsaparilla	ARNU2
			white baneberry	ACPA
Dishno-----	American basswood	TIAM	red maple	ACRU
	northern red oak	QURU	yellow birch	BEAL2
	quaking aspen	POTR5	thimbleberry	RUPA
	red pine	PIRE	violet	VIOLA
	sugar maple	ACSA3	twistedstalk	STREP3
			northern whitecedar	THOC2
			eastern hemlock	TSCA
			American basswood	TIAM
			twisted stalk	STAM2
			red elderberry	SACA11
			hairy Solomon's seal	POPU4
			Canada mayflower	MACA4
			spinulose woodfern	DRCA11
			sugar maple	ACSA3
			ladyfern	ATHYR
			sedge	CAREX

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
566. Beach, rubbly				
576B:				
Flintsteel-----	American basswood	TIAM	hairy Solomon's seal	POPU4
	balsam fir	ABBA	false Solomon's seal	SMILA
	basswood	TILIA	spinulose shield	DRSP4
	eastern hemlock	TSCA	fern	
	eastern hophornbeam	OSVI	Canada mayflower	MACA4
	green ash	FRPE	downy yellow violet	VIPU3
	northern whitecedar	THOC2	wild leek	ALTR3
	quaking aspen	POTRT	trillium	TRILL
	red maple	ACRU	violet	VIOLA
	sugar maple	ACSA3	yellow beadleily	CLBO3
	white ash	FRAM2	dutchman's breeches	DICU
	yellow birch	BEAL2	American fly	LOCA7
			honeysuckle	
			sedge	CAREX
Loggerhead-----	American basswood	TIAM	goldthread	COPTI
	balsam fir	ABBA	shining clubmoss	HULU2
	eastern hemlock	TSCA	sedge	CAREX
	green ash	FRPE	American fly	LOCA7
	quaking aspen	POTR5	honeysuckle	
	red maple	ACRU	violet	VIOLA
	sugar maple	ACSA3	spinulose shield	DRSP4
	yellow birch	BEAL2	fern	
576C:				
Flintsteel-----	American basswood	TIAM	downy yellow violet	VIPU3
	balsam fir	ABBA	American fly	LOCA7
	basswood	TILIA	honeysuckle	
	eastern hemlock	TSCA	spinulose shield	DRSP4
	eastern hophornbeam	OSVI	fern	
	green ash	FRPE	false Solomon's seal	SMILA
	northern whitecedar	THOC2	hairy Solomon's seal	POPU4
	quaking aspen	POTRT	Canada mayflower	MACA4
	red maple	ACRU	violet	VIOLA
	sugar maple	ACSA3	wild leek	ALTR3
	white ash	FRAM2	trillium	TRILL
	yellow birch	BEAL2	yellow beadleily	CLBO3
			dutchman's breeches	DICU
			sedge	CAREX
Loggerhead-----	American basswood	TIAM	spinulose shield	DRSP4
	balsam fir	ABBA	fern	
	eastern hemlock	TSCA	sedge	CAREX
	green ash	FRPE	shining clubmoss	HULU2
	quaking aspen	POTR5	goldthread	COPTI
	red maple	ACRU	American fly	LOCA7
	sugar maple	ACSA3	honeysuckle	
	yellow birch	BEAL2	violet	VIOLA

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
576D:				
Flintsteel-----	American basswood	TIAM	hairy Solomon's seal	POPU4
	balsam fir	ABBA	false Solomon's seal	SMILA
	basswood	TILIA	Canada mayflower	MACA4
	eastern hemlock	TSCA	downy yellow violet	VIPU3
	eastern hophornbeam	OSVI	wild leek	ALTR3
	green ash	FRPE	trillium	TRILL
	northern whitecedar	THOC2	violet	VIOLA
	quaking aspen	POTRT	yellow beadlelily	CLBO3
	red maple	ACRU	dutchman's breeches	DICU
	sugar maple	ACSA3	American fly	LOCA7
	white ash	FRAM2	honeysuckle	
	yellow birch	BEAL2	spinulose shield fern	DRSP4
			sedge	CAREX
Loggerhead-----	American basswood	TIAM	violet	VIOLA
	balsam fir	ABBA	goldthread	COPTI
	eastern hemlock	TSCA	spinulose shield	DRSP4
	green ash	FRPE	fern	
	quaking aspen	POTR5	shining clubmoss	HULU2
	red maple	ACRU	sedge	CAREX
	sugar maple	ACSA3	American fly	LOCA7
	yellow birch	BEAL2	honeysuckle	
577B:				
Loggerhead-----	American basswood	TIAM	goldthread	COPTI
	balsam fir	ABBA	sedge	CAREX
	eastern hemlock	TSCA	violet	VIOLA
	green ash	FRPE	American fly	LOCA7
	quaking aspen	POTR5	honeysuckle	
	red maple	ACRU	shining clubmoss	HULU2
	sugar maple	ACSA3	spinulose shield	DRSP4
	yellow birch	BEAL2	fern	
Chabeneau-----	American basswood	TIAM	American basswood	TIAM
	quaking aspen	POTR5	trillium	TRILL
	red pine	PIRE	eastern hemlock	TSCA
	sugar maple	ACSA3	American elm	ULAM
			eastern hophornbeam	OSVI
			Canada mayflower	MACA4
			smooth yellow violet	VIPUP2
			twisted stalk	STAM2
			bedstraw	GALIU
			ladyfern	ATHYR
			yellow birch	BEAL2
			rattlesnake fern	BOVI
			white ash	FRAM2
			blue cohosh	CATH2
			Canada white violet	VICA4
			false Solomon's seal	SMILA
			sugar maple	ACSA3
			red elderberry	SACA11
			hairy Solomon's seal	POPU4
			sweet cicely	OSCL
			downy yellow violet	VIPU3
			spinulose woodfern	DRCA11
			Jack in the pulpit	ARTR
			sedge	CAREX

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
577B: Arcadian-----	American elm	ULAM	smooth yellow violet	VIPUP2
	bigtooth aspen	POGR4	downy yellow violet	VIPU3
	black cherry	PRSE2	Canada white violet	VICA4
	eastern hemlock	TSCA	American elm	ULAM
	eastern hophornbeam	OSVI	eastern hemlock	TSCA
	white ash	FRAM2	sweet cicely	OSCL
	yellow birch	BEAL2	eastern hophornbeam	OSVI
	American basswood	TIAM	Canada mayflower	MACA4
	quaking aspen	POTR5	bedstraw	GALIUI
	sugar maple	ACSA3	white ash	FRAM2
			spinulose woodfern	DRCA11
			blue cohosh	CATH2
			sedge	CAREX
			rattlesnake fern	BOVI
			yellow birch	BEAL2
			ladyfern	ATHYR
			Jack in the pulpit	ARTR
			sugar maple	ACSA3
			trillium	TRILL
			American basswood	TIAM
			twisted stalk	STAM2
			false Solomon's seal	SMILA
			red elderberry	SACA11
			hairy Solomon's seal	POPU4
577C: Loggerhead-----	American basswood	TIAM	spinulose shield	DRSP4
	balsam fir	ABBA	fern	
	eastern hemlock	TSCA	sedge	CAREX
	green ash	FRPE	shining clubmoss	HULU2
	quaking aspen	POTR5	goldthread	COPTI
	red maple	ACRU	violet	VIOLA
	sugar maple	ACSA3	American fly	LOCA7
	yellow birch	BEAL2	honeysuckle	
Chabeneau-----	American basswood	TIAM	Jack in the pulpit	ARTR
	quaking aspen	POTR5	sweet cicely	OSCL
	red pine	PIRE	blue cohosh	CATH2
	sugar maple	ACSA3	spinulose woodfern	DRCA11
			white ash	FRAM2
			bedstraw	GALIUI
			Canada mayflower	MACA4
			eastern hophornbeam	OSVI
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			false Solomon's seal	SMILA
			twisted stalk	STAM2
			American basswood	TIAM
			trillium	TRILL
			eastern hemlock	TSCA
			American elm	ULAM
			Canada white violet	VICA4
			downy yellow violet	VIPU3
			smooth yellow violet	VIPUP2
			sugar maple	ACSA3
			ladyfern	ATHYR
			rattlesnake fern	BOVI
			yellow birch	BEAL2
			sedge	CAREX

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
577C:				
Arcadian-----	American elm	ULAM	smooth yellow violet	VIPUP2
	bigtooth aspen	POGR4	Canada white violet	VICA4
	black cherry	PRSE2	American elm	ULAM
	eastern hemlock	TSCA	eastern hemlock	TSCA
	eastern hophornbeam	OSVI	trillium	TRILL
	white ash	FRAM2	American basswood	TIAM
	yellow birch	BEAL2	twisted stalk	STAM2
	American basswood	TIAM	false Solomon's seal	SMILA
	quaking aspen	POTR5	red elderberry	SACA11
	sugar maple	ACSA3	hairy Solomon's seal	POPU4
			sweet cicely	OSCL
			eastern hophornbeam	OSVI
			Canada mayflower	MACA4
			downy yellow violet	VIPU3
			white ash	FRAM2
			spinulose woodfern	DRCA11
			blue cohosh	CATH2
			sedge	CAREX
			rattlesnake fern	BOVI
			yellow birch	BEAL2
			ladyfern	ATHYR
			Jack in the pulpit	ARTR
			sugar maple	ACSA3
			bedstraw	GALIU
577D:				
Loggerhead-----	American basswood	TIAM	sedge	CAREX
	balsam fir	ABBA	shining clubmoss	HULU2
	eastern hemlock	TSCA	American fly	LOCA7
	green ash	FRPE	honeysuckle	
	quaking aspen	POTR5	spinulose shield	DRSP4
	red maple	ACRU	fern	
	sugar maple	ACSA3	goldthread	COPTI
	yellow birch	BEAL2	violet	VIOLA
Chabeneau-----	American basswood	TIAM	downy yellow violet	VIPU3
	quaking aspen	POTR5	blue cohosh	CATH2
	red pine	PIRE	spinulose woodfern	DRCA11
	sugar maple	ACSA3	white ash	FRAM2
			bedstraw	GALIU
			Canada mayflower	MACA4
			eastern hophornbeam	OSVI
			sweet cicely	OSCL
			red elderberry	SACA11
			smooth yellow violet	VIPUP2
			false Solomon's seal	SMILA
			twisted stalk	STAM2
			American basswood	TIAM
			trillium	TRILL
			eastern hemlock	TSCA
			American elm	ULAM
			sugar maple	ACSA3
			Jack in the pulpit	ARTR
			hairy Solomon's seal	POPU4
			ladyfern	ATHYR
			Canada white violet	VICA4
			yellow birch	BEAL2
			sedge	CAREX
			rattlesnake fern	BOVI

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
577D:				
Arcadian-----	American elm	ULAM	eastern hemlock	TSCA
	bigtooth aspen	POGR4	American elm	ULAM
	black cherry	PRSE2	Canada white violet	VICA4
	eastern hemlock	TSCA	downy yellow violet	VIPU3
	eastern hophornbeam	OSVI	smooth yellow violet	VIPUP2
	white ash	FRAM2	trillium	TRILL
	yellow birch	BEAL2	false Solomon's seal	SMILA
	American basswood	TIAM	red elderberry	SACA11
	quaking aspen	POTR5	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	sweet cicely	OSCL
			Canada mayflower	MACA4
			twisted stalk	STAM2
			American basswood	TIAM
			ladyfern	ATHYR
			yellow birch	BEAL2
			rattlesnake fern	BOVI
			sedge	CAREX
			blue cohosh	CATH2
			spinulose woodfern	DRCA11
			white ash	FRAM2
			bedstraw	GALIU
			Jack in the pulpit	ARTR
			sugar maple	ACSA3
			eastern hophornbeam	OSVI
578D:				
Arcadian-----	American elm	ULAM	eastern hophornbeam	OSVI
	bigtooth aspen	POGR4	yellow birch	BEAL2
	black cherry	PRSE2	hairy Solomon's seal	POPU4
	eastern hemlock	TSCA	red elderberry	SACA11
	eastern hophornbeam	OSVI	false Solomon's seal	SMILA
	white ash	FRAM2	twisted stalk	STAM2
	yellow birch	BEAL2	Canada mayflower	MACA4
	American basswood	TIAM	eastern hemlock	TSCA
	quaking aspen	POTR5	Canada white violet	VICA4
	sugar maple	ACSA3	downy yellow violet	VIPU3
			bedstraw	GALIU
			Jack in the pulpit	ARTR
			American basswood	TIAM
			white ash	FRAM2
			spinulose woodfern	DRCA11
			blue cohosh	CATH2
			sedge	CAREX
			trillium	TRILL
			rattlesnake fern	BOVI
			American elm	ULAM
			ladyfern	ATHYR
			sugar maple	ACSA3
			sweet cicely	OSCL
			smooth yellow violet	VIPUP2
Keweenaw-----	balsam fir	ABBA	spinulose woodfern	DRCA11
	black cherry	PRSE2	feather Solomon's	MARAR
	eastern hemlock	TSCA	seal	
	eastern white pine	PIST	twistedstalk	STREP3
	northern red oak	QURU	western brackenfern	PTAQ
	paper birch	BEPA	Canada mayflower	MACA4
	quaking aspen	POTR5	red elderberry	SARAR3
	red maple	ACRU	American starflower	TRBO2
	sugar maple	ACSA3	shining clubmoss	HULU2
	yellow birch	BEAL2	wild sarsaparilla	ARNU2
			yellow beadlelily	CLBO3

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
625B:				
Fence-----	American basswood	TIAM	red maple	ACRU
	bigtooth aspen	POGR4	sugar maple	ACSA3
	black cherry	PRSE2	ladyfern	ATHYR
	eastern hemlock	TSCA	yellow birch	BEAL2
	quaking aspen	POTRT	sedge	CAREX
	red maple	ACRU	spinulose woodfern	DRCA11
	sugar maple	ACSA3	Canada mayflower	MACA4
	yellow birch	BEAL2	hairy Solomon's seal	POPU4
			red elderberry	SACA11
			twisted stalk	STAM2
			American basswood	TIAM
			eastern hemlock	TSCA
			American elm	ULAM
625C:				
Fence-----	American basswood	TIAM	red maple	ACRU
	bigtooth aspen	POGR4	sugar maple	ACSA3
	black cherry	PRSE2	ladyfern	ATHYR
	eastern hemlock	TSCA	yellow birch	BEAL2
	quaking aspen	POTRT	sedge	CAREX
	red maple	ACRU	spinulose woodfern	DRCA11
	sugar maple	ACSA3	Canada mayflower	MACA4
	yellow birch	BEAL2	hairy Solomon's seal	POPU4
			red elderberry	SACA11
			twisted stalk	STAM2
			American basswood	TIAM
			eastern hemlock	TSCA
			American elm	ULAM
626D:				
Sporley-----	bigtooth aspen	POGR4	sweet cicely	OSCL
	northern red oak	QURU	red baneberry	ACRU2
	red maple	ACRU	beaked hazelnut	COCO6
	sugar maple	ACSA3	ladyfern	ATFI
	yellow birch	BEAL2	twisted stalk	STAM2
			American starflower	TRBO2
			hawkweed	HIERA
			Canada mayflower	MACA4
			violet	VIOLA
			bedstraw	GALIU
			mapleleaf viburnum	VIAC
626E:				
Sporley-----	bigtooth aspen	POGR4	mapleleaf viburnum	VIAC
	northern red oak	QURU	bedstraw	GALIU
	red maple	ACRU	violet	VIOLA
	sugar maple	ACSA3	Canada mayflower	MACA4
	yellow birch	BEAL2	hawkweed	HIERA
			American starflower	TRBO2
			twisted stalk	STAM2
			ladyfern	ATFI
			beaked hazelnut	COCO6
			red baneberry	ACRU2
			sweet cicely	OSCL

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
648B: Annalake-----	American elm	ULAM	sugar maple	ACSA3
	bigtooth aspen	POGR4	Jack in the pulpit	ARTR
	black cherry	PRSE2	ladyfern	ATHYR
	eastern hemlock	TSCA	yellow birch	BEAL2
	eastern hophornbeam	OSVI	rattlesnake fern	BOVI
	white ash	FRAM2	sedge	CAREX
	yellow birch	BEAL2	blue cohosh	CATH2
	American basswood	TIAM	spinulose woodfern	DRCA11
	quaking aspen	POTR5	white ash	FRAM2
	sugar maple	ACSA3	bedstraw	GALIU
			Canada mayflower	MACA4
			eastern hophornbeam	OSVI
			sweet cicely	OSCL
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			false Solomon's seal	SMILA
			twisted stalk	STAM2
			American basswood	TIAM
			trillium	TRILL
			eastern hemlock	TSCA
			American elm	ULAM
			Canada white violet	VICA4
			downy yellow violet	VIPU3
			smooth yellow violet	VIPUP2
648C: Annalake-----	American elm	ULAM	sugar maple	ACSA3
	bigtooth aspen	POGR4	Jack in the pulpit	ARTR
	black cherry	PRSE2	yellow birch	BEAL2
	eastern hemlock	TSCA	rattlesnake fern	BOVI
	eastern hophornbeam	OSVI	sedge	CAREX
	white ash	FRAM2	blue cohosh	CATH2
	yellow birch	BEAL2	spinulose woodfern	DRCA11
	American basswood	TIAM	white ash	FRAM2
	quaking aspen	POTR5	bedstraw	GALIU
	sugar maple	ACSA3	Canada mayflower	MACA4
			eastern hophornbeam	OSVI
			sweet cicely	OSCL
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			false Solomon's seal	SMILA
			twisted stalk	STAM2
			American basswood	TIAM
			trillium	TRILL
			eastern hemlock	TSCA
			American elm	ULAM
			Canada white violet	VICA4
			downy yellow violet	VIPU3
			smooth yellow violet	VIPUP2
			ladyfern	ATHYR

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
650: Leafriver-----	American elm	ULAM	elderberry	SAMBU
	balsam poplar	POBA2	spinulose woodfern	DRCA11
	bigtooth aspen	POGR4	white ash	FRAM2
	black ash	FRNI	small enchanter's	CTAL
	quaking aspen	POTR5	nightshade	
	sugar maple	ACSA3	sedge	CAREX
	white ash	FRAM2	common ladyfern	ATFI
	red maple	ACRU	Jack in the pulpit	ARTR
			sugar maple	ACSA3
			red maple	ACRU
			balsam fir	ABBA
			jewelweed	IMCA
			black ash	FRNI
			raspberry	RUIDI
			dewberry	RUHIS3
			gooseberry	RIBES
			grasses	POA
			mint	MENTH
			Canada mayflower	MACA4
652B: Manido-----	balsam fir	ABBA	raspberry	RUIDI
	eastern hemlock	TSCA	brackenfern	PTERI
	red maple	ACRU	bunchberry dogwood	COCA13
	sugar maple	ACSA3	starflower	TRBO2
	white spruce	PIGL	spinulose shield	DRSP4
	yellow birch	BEAL2	fern	
			yellow beadlelily	CLBO3
			Canada mayflower	MACA4
			wild sarsaparilla	ARNU2
Annalake-----	American basswood	TIAM	sedge	CAREX
	bigtooth aspen	POGR4	spinulose woodfern	DRCA11
	black cherry	PRSE2	Canada mayflower	MACA4
	eastern hemlock	TSCA	eastern hophornbeam	OSVI
	eastern hophornbeam	OSVI	sweet cicely	OSCL
	quaking aspen	POTR5	yellow birch	BEAL2
	red maple	ACRU	red elderberry	SACA11
	sugar maple	ACSA3	twisted stalk	STAM2
	white ash	FRAM2	American basswood	TIAM
	yellow birch	BEAL2	eastern hemlock	TSCA
			American elm	ULAM
			Canada white violet	VICA4
			sugar maple	ACSA3
			red maple	ACRU
			hairy Solomon's seal	POPU4
			ladyfern	ATHYR
656B: Stutts-----	eastern hemlock	TSCA	sedge	CAREX
	eastern white pine	PIST	starflower	TRBO2
	jack pine	PIBA2	brackenfern	PTERI
	northern red oak	QURU	Canada mayflower	MACA4
	paper birch	BEP4	shining clubmoss	HULU2
	quaking aspen	POTR5	barren strawberry	WAFR
	red pine	PIRE	beaked hazelnut	COCO6
	sugar maple	ACSA3		
	yellow birch	BEAL2		

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
656B:				
Zandi-----	American basswood	TIAM	Canada mayflower	MACA4
	eastern white pine	PIST	wild sarsaparilla	ARNU2
	northern red oak	QURU	twisted stalk	STAM2
	red maple	ACRU	moss	2MOSS
	red pine	PIRE	ladyfern	ATFI
	sugar maple	ACSA3		
	yellow birch	BEAL2		
656C:				
Stutts-----	eastern hemlock	TSCA	brackenfern	PTERI
	eastern white pine	PIST	shining clubmoss	HULU2
	jack pine	PIBA2	barren strawberry	WAFR
	northern red oak	QURU	beaked hazelnut	COCO6
	paper birch	BEPA	sedge	CAREX
	quaking aspen	POTR5	starflower	TRBO2
	red pine	PIRE	Canada mayflower	MACA4
	sugar maple	ACSA3		
	yellow birch	BEAL2		
Zandi-----	American basswood	TIAM	twisted stalk	STAM2
	eastern white pine	PIST	Canada mayflower	MACA4
	northern red oak	QURU	wild sarsaparilla	ARNU2
	red maple	ACRU	ladyfern	ATFI
	red pine	PIRE	moss	2MOSS
	sugar maple	ACSA3		
	yellow birch	BEAL2		
656D:				
Stutts-----	eastern hemlock	TSCA	shining clubmoss	HULU2
	eastern white pine	PIST	barren strawberry	WAFR
	jack pine	PIBA2	beaked hazelnut	COCO6
	northern red oak	QURU	sedge	CAREX
	paper birch	BEPA	starflower	TRBO2
	quaking aspen	POTR5	brackenfern	PTERI
	red pine	PIRE	Canada mayflower	MACA4
	sugar maple	ACSA3		
	yellow birch	BEAL2		
Zandi-----	American basswood	TIAM	twisted stalk	STAM2
	eastern white pine	PIST	Canada mayflower	MACA4
	northern red oak	QURU	wild sarsaparilla	ARNU2
	red maple	ACRU	ladyfern	ATFI
	red pine	PIRE	spinulose shield	DRSP4
	sugar maple	ACSA3	fern	
	yellow birch	BEAL2	moss	2MOSS
680B:				
Tonkey-----	American basswood	TIAM	sedge	CAREX
	balsam fir	ABBA	ladyfern	ATFI
	northern whitecedar	THOC2	jewelweed	IMCA
	quaking aspen	POTR5	horsetail	EQUIS
	red maple	ACRU	cinnamon fern	OSCI
			brackenfern	PTAQ

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
680B:				
Pleine-----	balsam fir	ABBA	misc. perennial	PPGG
	balsam poplar	POBA2	grasses	
	black ash	FRNI	ladyfern	ATFI
	northern whitecedar	THOC2	sedge	CAREX
	paper birch	BEPA	jewelweed	IMCA
	red maple	ACRU	Canada mayflower	MACA4
			mint	MENTH
			elderberry	SAMBU
			gooseberry	RIBES
			northern dewberry	RUFL
			American red	RUID
			raspberry	
			nightshade	SOLAN
			stinging nettle	URDI
Annalake-----	American basswood	TIAM	Canada white violet	VICA4
	bigtooth aspen	POGR4	American elm	ULAM
	black cherry	PRSE2	eastern hemlock	TSCA
	eastern hemlock	TSCA	American basswood	TIAM
	eastern hophornbeam	OSVI	eastern hophornbeam	OSVI
	quaking aspen	POTR5	red elderberry	SACA11
	red maple	ACRU	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	sweet cicely	OSCL
	white ash	FRAM2	spinulose woodfern	DRCA11
	yellow birch	BEAL2	sedge	CAREX
			yellow birch	BEAL2
			ladyfern	ATHYR
			sugar maple	ACSA3
			red maple	ACRU
			twisted stalk	STAM2
			Canada mayflower	MACA4
681:				
Cathro-----	balsam fir	ABBA	goldthread	COPTI
	black spruce	PIMA	bedstraw	GALIU
	northern whitecedar	THOC2	rattlesnake fern	BOVI
	paper birch	BEPA	American starflower	TRBO2
	red maple	ACRU	sedge	CAREX
	tamarack	LALA	spinulose woodfern	DRCA11
	white spruce	PIGL	northern dewberry	RUFL
			common ladyfern	ATFI
			naked miterwort	MINU3
			sphagnum moss	SPHAG*
			woodsorrel	OXALI
Tonkey-----	American basswood	TIAM	jewelweed	IMCA
	balsam fir	ABBA	horsetail	EQUIS
	northern whitecedar	THOC2	sedge	CAREX
	quaking aspen	POTR5	ladyfern	ATFI
	red maple	ACRU	brackenfern	PTAQ
			cinnamon fern	OSCI

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
683B:				
Amasa-----	American basswood	TIAM	rattlesnake fern	BOVI
	American elm	ULAM	yellow birch	BEAL2
	bigtooth aspen	POGR4	ladyfern	ATHYR
	black cherry	PRSE2	Jack in the pulpit	ARTR
	eastern hemlock	TSCA	sugar maple	ACSA3
	eastern hophornbeam	OSVI	spinulose woodfern	DRCA11
	quaking aspen	POTR5	American elm	ULAM
	sugar maple	ACSA3	Canada white violet	VICA4
	white ash	FRAM2	downy yellow violet	VIPU3
	yellow birch	BEAL2	eastern hemlock	TSCA
			white ash	FRAM2
			bedstraw	GALIU
			Canada mayflower	MACA4
			trillium	TRILL
			sedge	CAREX
			smooth yellow violet	VIPUP2
			eastern hophornbeam	OSVI
			sweet cicely	OSCL
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			false Solomon's seal	SMILA
			twisted stalk	STAM2
			American basswood	TIAM
			blue cohosh	CATH2
Oldman-----	American basswood	TIAM	thimbleberry	RUPA
	eastern hemlock	TSCA	American fly	LOCA7
	green ash	FRPE	honeysuckle	
	northern red oak	QURU	Canada mayflower	MACA4
	quaking aspen	POTR5	twistedstalk	STREP3
	sugar maple	ACSA3	yellow beادلily	CLBO3
	yellow birch	BEAL2	sedge	CAREX
			sweet cicely	OSCL
			wild sarsaparilla	ARNU2
			violet	VIOLA
			rattlesnake fern	BOVI
			American starflower	TRBO2
			partridgeberry	MIRE
			downy yellow violet	VIPU3
			large leaved aster	ASMA2
			spinulose shield	DRSP4
			fern	
			trout lily	ERAM5

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
683C:				
Amasa-----	American basswood	TIAM	trillium	TRILL
	American elm	ULAM	blue cohosh	CATH2
	bigtooth aspen	POGR4	false Solomon's seal	SMILA
	black cherry	PRSE2	twisted stalk	STAM2
	eastern hemlock	TSCA	American basswood	TIAM
	eastern hophornbeam	OSVI	eastern hemlock	TSCA
	quaking aspen	POTR5	American elm	ULAM
	sugar maple	ACSA3	Canada white violet	VICA4
	white ash	FRAM2	downy yellow violet	VIPU3
	yellow birch	BEAL2	smooth yellow violet	VIPUP2
			red elderberry	SACA11
			hairy Solomon's seal	POPU4
			sweet cicely	OSCL
			eastern hophornbeam	OSVI
			Canada mayflower	MACA4
			bedstraw	GALIU
			white ash	FRAM2
			spinulose woodfern	DRCA11
			sedge	CAREX
			rattlesnake fern	BOVI
			yellow birch	BEAL2
			ladyfern	ATHYR
			Jack in the pulpit	ARTR
			sugar maple	ACSA3
Oldman-----	American basswood	TIAM	spinulose shield	DRSP4
	eastern hemlock	TSCA	fern	
	green ash	FRPE	American starflower	TRBO2
	northern red oak	QURU	Canada mayflower	MACA4
	quaking aspen	POTR5	twistedstalk	STREP3
	sugar maple	ACSA3	yellow beادلily	CLBO3
	yellow birch	BEAL2	sedge	CAREX
			trout lily	ERAM5
			sweet cicely	OSCL
			American fly	LOCA7
			honeysuckle	
			wild sarsaparilla	ARNU2
			large leaved aster	ASMA2
			downy yellow violet	VIPU3
			partridgeberry	MIRE
			thimbleberry	RUPA
			rattlesnake fern	BOVI
			violet	VIOLA

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
683D:				
Amasa-----	American basswood	TIAM	twisted stalk	STAM2
	American elm	ULAM	false Solomon's seal	SMILA
	bigtooth aspen	POGR4	red elderberry	SACA11
	black cherry	PRSE2	hairy Solomon's seal	POPU4
	eastern hemlock	TSCA	sweet cicely	OSCL
	eastern hophornbeam	OSVI	sugar maple	ACSA3
	quaking aspen	POTR5	American basswood	TIAM
	sugar maple	ACSA3	trillium	TRILL
	white ash	FRAM2	eastern hophornbeam	OSVI
	yellow birch	BEAL2	eastern hemlock	TSCA
			American elm	ULAM
			Canada white violet	VICA4
			Canada mayflower	MACA4
			downy yellow violet	VIPU3
			smooth yellow violet	VIPUP2
			bedstraw	GALIU
			white ash	FRAM2
			spinulose woodfern	DRCA11
			blue cohosh	CATH2
			sedge	CAREX
			rattlesnake fern	BOVI
			yellow birch	BEAL2
			ladyfern	ATHYR
			Jack in the pulpit	ARTR
Oldman-----	American basswood	TIAM	trout lily	ERAM5
	eastern hemlock	TSCA	spinulose shield	DRSP4
	green ash	FRPE	fern	
	northern red oak	QURU	large leaved aster	ASMA2
	quaking aspen	POTR5	downy yellow violet	VIPU3
	sugar maple	ACSA3	partridgeberry	MIRE
	yellow birch	BEAL2	American starflower	TRBO2
			rattlesnake fern	BOVI
			violet	VIOLA
			sedge	CAREX
			yellow beadlelily	CLBO3
			twistedstalk	STREP3
			Canada mayflower	MACA4
			American fly	LOCA7
			honeysuckle	
			thimbleberry	RUPA
			wild sarsaparilla	ARNU2
			sweet cicely	OSCL
684B:				
Amasa-----	American basswood	TIAM	spinulose shield	DRSP4
	bigtooth aspen	POGR4	fern	
	black cherry	PRSE2	smooth yellow violet	VIPUP2
	eastern hemlock	TSCA	downy yellow violet	VIPU3
	eastern hophornbeam	OSVI	Canada white violet	VICA4
	quaking aspen	POTR5	rattlesnake fern	BOVI
	sugar maple	ACSA3	sedge	CAREX
	yellow birch	BEAL2	blue cohosh	CATH2
			trillium	TRILL
			twisted stalk	STAM2
			false Solomon's seal	SMILA
			red elderberry	SACA11
			hairy Solomon's seal	POPU4
			ladyfern	ATHYR
			Jack in the pulpit	ARTR
			sweet cicely	OSCL
			Canada mayflower	MACA4
			bedstraw	GALIU

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
684C:				
Amasa-----	American basswood	TIAM	eastern hemlock	TSCA
	bigtooth aspen	POGR4	American elm	ULAM
	black cherry	PRSE2	American basswood	TIAM
	eastern hemlock	TSCA	red elderberry	SACA11
	quaking aspen	POTR5	twisted stalk	STAM2
	red maple	ACRU	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	Canada mayflower	MACA4
	yellow birch	BEAL2	spinulose woodfern	DRCA11
			sedge	CAREX
			red maple	ACRU
			sugar maple	ACSA3
			ladyfern	ATHYR
			yellow birch	BEAL2
684D:				
Amasa-----	American basswood	TIAM	spinulose woodfern	DRCA11
	bigtooth aspen	POGR4	sedge	CAREX
	black cherry	PRSE2	yellow birch	BEAL2
	eastern hemlock	TSCA	ladyfern	ATHYR
	quaking aspen	POTR5	sugar maple	ACSA3
	red maple	ACRU	red maple	ACRU
	sugar maple	ACSA3	Canada mayflower	MACA4
	yellow birch	BEAL2	eastern hemlock	TSCA
			American elm	ULAM
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			American basswood	TIAM
			twisted stalk	STAM2
686B:				
Annalake-----	American basswood	TIAM	red elderberry	SACA11
	bigtooth aspen	POGR4	eastern hemlock	TSCA
	black cherry	PRSE2	hairy Solomon's seal	POPU4
	eastern hemlock	TSCA	sweet cicely	OSCL
	eastern hophornbeam	OSVI	eastern hophornbeam	OSVI
	quaking aspen	POTR5	Canada mayflower	MACA4
	red maple	ACRU	spinulose woodfern	DRCA11
	sugar maple	ACSA3	sedge	CAREX
	white ash	FRAM2	yellow birch	BEAL2
	yellow birch	BEAL2	ladyfern	ATHYR
			sugar maple	ACSA3
			red maple	ACRU
			twisted stalk	STAM2
			American basswood	TIAM
			Canada white violet	VICA4
			American elm	ULAM
Robago-----	balsam poplar	POBA2	spinulose shield	DRSP4
	eastern hemlock	TSCA	fern	
	green ash	FRPE	trillium	TRILL
	paper birch	BEPA	Canada mayflower	MACA4
	quaking aspen	POTR5	wood sorrel	OXMO
	red maple	ACRU	yellow beadlily	CLBO3
	sugar maple	ACSA3	cinnamon fern	OSCI
	yellow birch	BEAL2	horsetail	EQUIS
			ladyfern	ATFI
			large leaved aster	ASMA2
			oakfern	GYDR
			sedge	CAREX

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
688: Cathro-----	balsam fir	ABBA	sedge	CAREX
	black spruce	PIMA	American starflower	TRBO2
	northern whitecedar	THOC2	spinulose woodfern	DRCA11
	paper birch	BEPa	bedstraw	GALIU
	red maple	ACRU	goldthread	COPTI
	tamarack	LALA	woodsorrel	OXALI
	white spruce	PIGL	sphagnum moss	SPHAG*
			naked miterwort	MINU3
			northern dewberry	RUFL
			rattlesnake fern	BOVI
			common ladyfern	ATFI
Leafriver-----	American elm	ULAM	grasses	POA
	balsam poplar	POBA2	gooseberry	RIBES
	bigtooth aspen	POGR4	dewberry	RUHIS3
	black ash	FRNI	raspberry	RUIDI
	quaking aspen	POTR5	Canada mayflower	MACA4
	sugar maple	ACSA3	red maple	ACRU
	white ash	FRAM2	sugar maple	ACSA3
	red maple	ACRU	Jack in the pulpit	ARTR
			common ladyfern	ATFI
			jewelweed	IMCA
			black ash	FRNI
			elderberry	SAMBU
			white ash	FRAM2
			balsam fir	ABBA
			spinulose woodfern	DRCA11
			sedge	CAREX
			small enchanter's nightshade	CIAL
			mint	MENTH
689B: Chabeneau-----	American basswood	TIAM	yellow birch	BEAL2
	northern red oak	QURU	red maple	ACRU
	quaking aspen	POTR5	sugar maple	ACSA3
	red pine	PIRE	ladyfern	ATHYR
	sugar maple	ACSA3	American elm	ULAM
			sedge	CAREX
			spinulose woodfern	DRCA11
			Canada mayflower	MACA4
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			twisted stalk	STAM2
			American basswood	TIAM
			eastern hemlock	TSCA
Channing-----	American basswood	TIAM	eastern hemlock	TSCA
	northern red oak	QURU	red maple	ACRU
	quaking aspen	POTR5	sugar maple	ACSA3
	red pine	PIRE	ladyfern	ATHYR
	sugar maple	ACSA3	yellow birch	BEAL2
			sedge	CAREX
			small enchanter's nightshade	CIAL
			spinulose woodfern	DRCA11
			jewelweed	IMCA
			Canada mayflower	MACA4
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			American elm	ULAM
			American basswood	TIAM
			twisted stalk	STAM2

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
689B: Gogebic-----	American basswood	TIAM	Jack in the pulpit	ARTR
	eastern hemlock	TSCA	red elderberry	SACA11
	eastern hophornbeam	OSVI	Maryland sanicle	SAMA2
	northern red oak	QURU	white baneberry	ACPA
	quaking aspen	POTR5	wild sarsaparilla	ARNU2
	red maple	ACRU	rattlesnake fern	BOVI
	red pine	PIRE	sedge	CAREX
	sugar maple	ACSA3	blue cohosh	CATH2
	white ash	FRAM2	yellow beadlily	CLBO3
	yellow birch	BEAL2	spinulose shield fern	DRSP4
			bedstraw	GALIU
			downy yellow violet	VIPU3
			violet	VIOLA
			twisted stalk	STAM2
			elderberry	SAMBU
			common ladyfern	ATFI
			hairy Solomon's seal	POPU4
			sweet cicely	OSCL
			sensitive fern	ONSE
			Canada mayflower	MACA4
			oakfern	GYDR
691B: Dishno-----	American basswood	TIAM	Canada mayflower	MACA4
	quaking aspen	POTR5	northern whitecedar	THOC2
	red pine	PIRE	violet	VIOLA
	sugar maple	ACSA3	bedstraw	GALIU
			Jack in the pulpit	ARTR
			spinulose woodfern	DRCA11
			ladyfern	ATHYR
			yellow birch	BEAL2
			rattlesnake fern	BOVI
			blue cohosh	CATH2
			eastern hophornbeam	OSVI
			sedge	CAREX
			white ash	FRAM2
			sugar maple	ACSA3
			twistedstalk	STREP3
			thimbleberry	RUPA
Tula-----	balsam fir	ABBA	American fly	LOCA7
	eastern hemlock	TSCA	honeysuckle	
	eastern white pine	PIST	yellow beadlily	CLBO3
	quaking aspen	POTRT	bunchberry dogwood	COCA13
	red maple	ACRU	goldthread	COPTI
	sugar maple	ACSA3	spinulose shield fern	DRSP4
			wintergreen	GAPR2
			oakfern	GYDR
			shining clubmoss	HULU2
			American starflower	TRBO2
			Canada mayflower	MACA4
			wood sorrel	OXMO
			wild sarsaparilla	ARNU2
			sedge	CAREX
			hairy Solomon's seal	POPU4
			twisted stalk	STAM2
Rock outcrop.				

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
691D:				
Dishno-----	American basswood	TIAM	yellow birch	BEAL2
	quaking aspen	POTR5	northern whitecedar	THOC2
	red pine	PIRE	twistedstalk	STREP3
	sugar maple	ACSA3	violet	VIOLA
			thimbleberry	RUPA
			sugar maple	ACSA3
			Jack in the pulpit	ARTR
			ladyfern	ATHYR
			eastern hophornbeam	OSVI
			rattlesnake fern	BOVI
			sedge	CAREX
			blue cohosh	CATH2
			spinulose woodfern	DRCA11
			white ash	FRAM2
			bedstraw	GALIUI
			Canada mayflower	MACA4
Tula-----	balsam fir	ABBA	shining clubmoss	HULU2
	eastern hemlock	TSCA	yellow beadlily	CLBO3
	eastern white pine	PIST	bunchberry dogwood	COCA13
	quaking aspen	POTRT	goldthread	COPTI
	red maple	ACRU	spinulose shield	DRSP4
	sugar maple	ACSA3	fern	
			wintergreen	GAPR2
			oakfern	GYDR
			American fly	LOCA7
			honeysuckle	
			Canada mayflower	MACA4
			wood sorrel	OXMO
			wild sarsaparilla	ARNU2
			sedge	CAREX
			hairy Solomon's seal	POPU4
			twisted stalk	STAM2
			American starflower	TRBO2
Rock outcrop.				
693B:				
Chabeneau-----	American basswood	TIAM	sweet cicely	OSCL
	quaking aspen	POTR5	blue cohosh	CATH2
	red pine	PIRE	spinulose woodfern	DRCA11
	sugar maple	ACSA3	white ash	FRAM2
			bedstraw	GALIUI
			Canada mayflower	MACA4
			eastern hophornbeam	OSVI
			sedge	CAREX
			hairy Solomon's seal	POPU4
			red elderberry	SACA11
			false Solomon's seal	SMILA
			twisted stalk	STAM2
			American basswood	TIAM
			trillium	TRILL
			eastern hemlock	TSCA
			American elm	ULAM
			Canada white violet	VICA4
			downy yellow violet	VIPU3
			smooth yellow violet	VIPUP2
			sugar maple	ACSA3
			Jack in the pulpit	ARTR
			ladyfern	ATHYR
			yellow birch	BEAL2
			rattlesnake fern	BOVI

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
693B:				
Annalake-----	American basswood	TIAM	twisted stalk	STAM2
	bigtooth aspen	POGR4	American basswood	TIAM
	black cherry	PRSE2	eastern hemlock	TSCA
	eastern hemlock	TSCA	American elm	ULAM
	eastern hophornbeam	OSVI	Canada white violet	VICA4
	quaking aspen	POTR5	red elderberry	SACA11
	red maple	ACRU	hairy Solomon's seal	POPU4
	sugar maple	ACSA3	sweet cicely	OSCL
	white ash	FRAM2	sugar maple	ACSA3
	yellow birch	BEAL2	red maple	ACRU
			yellow birch	BEAL2
			sedge	CAREX
			ladyfern	ATHYR
			eastern hophornbeam	OSVI
			Canada mayflower	MACA4
			spinulose woodfern	DRCA11
694D:				
Annalake-----	American basswood	TIAM	Canada mayflower	MACA4
	bigtooth aspen	POGR4	eastern hophornbeam	OSVI
	black cherry	PRSE2	sweet cicely	OSCL
	eastern hemlock	TSCA	hairy Solomon's seal	POPU4
	eastern hophornbeam	OSVI	red elderberry	SACA11
	quaking aspen	POTR5	twisted stalk	STAM2
	red maple	ACRU	spinulose woodfern	DRCA11
	sugar maple	ACSA3	Canada white violet	VICA4
	white ash	FRAM2	eastern hemlock	TSCA
	yellow birch	BEAL2	American basswood	TIAM
			American elm	ULAM
			sugar maple	ACSA3
			red maple	ACRU
			sedge	CAREX
			yellow birch	BEAL2
			ladyfern	ATHYR
Stutts-----	eastern hemlock	TSCA	brackenfern	PTERI
	eastern white pine	PIST	starflower	TRBO2
	jack pine	PIBA2	sedge	CAREX
	northern red oak	QURU	beaked hazelnut	COCO6
	paper birch	BEPA	shining clubmoss	HULU2
	quaking aspen	POTR5	barren strawberry	WAFR
	red pine	PIRE	Canada mayflower	MACA4
	sugar maple	ACSA3		
	yellow birch	BEAL2		
Arnheim-----	balsam fir	ABBA	jewelweed	IMCA
	black ash	FRNI	American elm	ULAM
	black spruce	PIMA	raspberry	RUIDI
	green ash	FRPE	dewberry	RUHIS3
	northern whitecedar	THOC2	grasses	POA
	paper birch	BEPA	sensitive fern	ONSE
	quaking aspen	POTR5	mint	MENTH
	red maple	ACRU	bedstraw	GALIU
	tamarack	LALA	black ash	FRNI
	white spruce	PIGL	sedge	CAREX
	yellow birch	BEAL2	common ladyfern	ATFI
			balsam fir	ABBA
			speckled alder	ALINR
			red maple	ACRU

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
5170:				
Minocqua-----	balsam fir	ABBA	grasses	POA
	balsam poplar	POBA2	woodfern	DRYOP
	bigtooth aspen	POGR4	twisted stalk	STAM2
	black ash	FRNI	shining clubmoss	HULU2
	black spruce	PIMA	American fly	LOCA7
	eastern hemlock	TSCA	honeysuckle	
	northern whitecedar	THOC2	sedge	CAREX
	paper birch	BEPA	yellow beadleily	CLB03
	quaking aspen	POTR5	bunchberry dogwood	COCA13
	red maple	ACRU	starflower	TRB02
	sugar maple	ACSA3	northern whitecedar	THOC2
	white spruce	PIGL	white spruce	PIGL
	yellow birch	BEAL2	wood sorrel	OXMO
			Canada mayflower	MACA4
			balsam fir	ABBA
			red maple	ACRU
			sugar maple	ACSA3
			yellow birch	BEAL2
			brackenfern	PTERI
			goldthread	COPTI
			wintergreen	GAPR2
			blueberry	VACCI
			eastern hemlock	TSCA
Pleine-----	balsam fir	ABBA	ladyfern	ATFI
	balsam poplar	POBA2	northern dewberry	RUFL
	black ash	FRNI	sedge	CAREX
	northern whitecedar	THOC2	stinging nettle	URDI
	paper birch	BEPA	jewelweed	IMCA
	red maple	ACRU	Canada mayflower	MACA4
			gooseberry	RIBES
			misc. perennial	PPGG
			grasses	
			elderberry	SAMBU
			nightshade	SOLAN
			mint	MENTH
			American red	RUID
			raspberry	
Cathro-----	balsam fir	ABBA	sphagnum moss	SPHAG*
	black spruce	PIMA	northern dewberry	RUFL
	northern whitecedar	THOC2	woodsorrel	OXALI
	paper birch	BEPA	naked miterwort	MINU3
	red maple	ACRU	bedstraw	GALIU
	tamarack	LALA	spinulose woodfern	DRCA11
	white spruce	PIGL	goldthread	COPTI
			sedge	CAREX
			rattlesnake fern	BOVI
			common ladyfern	ATFI
			speckled alder	ALINR
			redosier dogwood	COSES
			American starflower	TRB02

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
5171B:				
Tula-----	balsam fir	ABBA	common ladyfern	ATFI
	eastern hemlock	TSCA	sedge	CAREX
	eastern white pine	PIST	yellow beادلily	CLB03
	quaking aspen	POTRT	goldthread	COTR2
	red maple	ACRU	spinulose woodfern	DRCA11
	sugar maple	ACSA3	clubmoss	LYCOP2
			rare clubmoss	LYOB
			Canada mayflower	MACA4
			wood sorrel	OXMO
			western brackenfern	PTAQ
			claspleaf	STAM2
			twistedstalk	
			bigleaf aster	ASMA2
Wormet-----	balsam fir	ABBA	brackenfern	PTERI
	bigtooth aspen	POGR4	partridgeberry	MIRE
	eastern hemlock	TSCA	Canada beadruby	MACA4
	eastern white pine	PIST	American fly	LOCA7
	jack pine	PIBA2	honeysuckle	
	northern whitecedar	THOC2	pink lady's slipper	CYAC3
	paper birch	BEPA	coptis	COPTI
	quaking aspen	POTR5	bunchberry dogwood	COCA13
	red maple	ACRU	sedge	CAREX
	yellow birch	BEAL2	paper birch	BEPA
			yellow birch	BEAL2
			wild sarsaparilla	ARNU2
			red maple	ACRU
Gogebic, sandy substratum-----	American basswood	TIAM	white baneberry	ACPA
	eastern hemlock	TSCA	wild sarsaparilla	ARNU2
	eastern hophornbeam	OSVI	Jack in the pulpit	ARTR
	northern red oak	QURU	rattlesnake fern	BOVI
	quaking aspen	POTR5	sedge	CAREX
	red maple	ACRU	blue cohosh	CATH2
	red pine	PIRE	yellow beادلily	CLB03
	sugar maple	ACSA3	spinulose shield	DRSP4
	white ash	FRAM2	fern	
	yellow birch	BEAL2	common ladyfern	ATFI
			elderberry	SAMBU
			Maryland sanicle	SAMA2
			sweet cicely	OSCL
			sensitive fern	ONSE
			Canada mayflower	MACA4
			bedstraw	GALIU
			violet	VIOLA
			downy yellow violet	VIPU3
			oakfern	GYDR

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
5172B: Gogebic, sandy substratum-----	American basswood	TIAM	sensitive fern	ONSE
	eastern hemlock	TSCA	Canada mayflower	MACA4
	eastern hophornbeam	OSVI	oakfern	GYDR
	northern red oak	QURU	bedstraw	GALIU
	quaking aspen	POTR5	spinulose shield	DRSP4
	red maple	ACRU	fern	
	red pine	PIRE	sweet cicely	OSCL
	sugar maple	ACSA3	Jack in the pulpit	ARTR
	white ash	FRAM2	wild sarsaparilla	ARNU2
	yellow birch	BEAL2	white baneberry	ACPA
			Maryland sanicle	SAMA2
			common ladyfern	ATFI
			blue cohosh	CATH2
			violet	VIOLA
			sedge	CAREX
			downy yellow violet	VIPU3
			rattlesnake fern	BOVI
			elderberry	SAMBU
			yellow beadlelily	CLBO3
Pence-----	balsam fir	ABBA	blueberry	VACCI
	eastern white pine	PIST	sweetfern	COPE80
	northern red oak	QURU	serviceberry	AMELA
	paper birch	BEPA	wild sarsaparilla	ARNU2
	quaking aspen	POTRT	bigleaf aster	ASMA2
	red maple	ACRU	beaked hazelnut	COCO6
	red pine	PIRE	eastern teaberry	GAPR2
			cowwheat	MELAM2
			misc. perennial	PPGG
			grasses	
			brackenfern	PTERI
			starflower	TRIEU
			lowbush blueberry	VAAN
			barren strawberry	WAFR
Cathro-----	balsam fir	ABBA	speckled alder	ALINR
	black spruce	PIMA	redosier dogwood	COSES
	northern whitecedar	THOC2	American starflower	TRBO2
	paper birch	BEPA	sphagnum moss	SPHAG*
	red maple	ACRU	northern dewberry	RUFL
	tamarack	LALA	woodsorrel	OXALI
	white spruce	PIGL	naked miterwort	MINU3
			bedstraw	GALIU
			spinulose woodfern	DRCA11
			goldthread	COPTI
			sedge	CAREX
			rattlesnake fern	BOVI
			common ladyfern	ATFI

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
5172C: Gogebic, sandy substratum-----	American basswood	TIAM	downy yellow violet	VIPU3
	eastern hemlock	TSCA	violet	VIOLA
	eastern hophornbeam	OSVI	elderberry	SAMBU
	northern red oak	QURU	Maryland sanicle	SAMA2
	quaking aspen	POTR5	sweet cicely	OSCL
	red maple	ACRU	sensitive fern	ONSE
	red pine	PIRE	Canada mayflower	MACA4
	sugar maple	ACSA3	oakfern	GYDR
	white ash	FRAM2	bedstraw	GALIU
	yellow birch	BEAL2	spinulose shield fern	DRSP4
			yellow beadlily	CLBO3
			blue cohosh	CATH2
			sedge	CAREX
			rattlesnake fern	BOVI
			Jack in the pulpit	ARTR
			common ladyfern	ATFI
			white baneberry	ACPA
			wild sarsaparilla	ARNU2
Pence-----	balsam fir	ABBA	lowbush blueberry	VAAN
	eastern white pine	PIST	starflower	TRIEH
	northern red oak	QURU	barren strawberry	WAFR
	paper birch	BEPA	misc. perennial	PPGG
	quaking aspen	POTRT	grasses	
	red maple	ACRU	cowwheat	MELAM2
	red pine	PIRE	eastern teaberry	GAPR2
			blueberry	VACCI
			bigleaf aster	ASMA2
			wild sarsaparilla	ARNU2
			serviceberry	AMELA
			sweetfern	COPE80
			beaked hazelnut	COCO6
			brackenfern	PTERI
Cathro-----	balsam fir	ABBA	common ladyfern	ATFI
	black spruce	PIMA	rattlesnake fern	BOVI
	northern whitecedar	THOC2	sedge	CAREX
	paper birch	BEPA	goldthread	COPTI
	red maple	ACRU	spinulose woodfern	DRCA11
	tamarack	LALA	bedstraw	GALIU
	white spruce	PIGL	naked miterwort	MINU3
			woodsorrel	OXALI
			northern dewberry	RUFL
			sphagnum moss	SPHAG*
			American starflower	TRBO2
			redosier dogwood	COSES
			speckled alder	ALINR

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
5172D: Gogebic, sandy substratum-----	American basswood	TIAM	downy yellow violet	VIPU3
	eastern hemlock	TSCA	violet	VIOLA
	eastern hophornbeam	OSVI	elderberry	SAMBU
	northern red oak	QURU	Maryland sanicle	SAMA2
	quaking aspen	POTR5	sweet cicely	OSCL
	red maple	ACRU	Canada mayflower	MACA4
	red pine	PIRE	oakfern	GYDR
	sugar maple	ACSA3	bedstraw	GALIUI
	white ash	FRAM2	Jack in the pulpit	ARTR
	yellow birch	BEAL2	common ladyfern	ATFI
			white baneberry	ACPA
			wild sarsaparilla	ARNU2
			rattlesnake fern	BOVI
			sedge	CAREX
			blue cohosh	CATH2
			yellow beadlily	CLBO3
			spinulose shield fern	DRSP4
			sensitive fern	ONSE
Pence-----	balsam fir	ABBA	serviceberry	AMELA
	eastern white pine	PIST	barren strawberry	WAFR
	northern red oak	QURU	blueberry	VACCI
	paper birch	BEPA	lowbush blueberry	VAAN
	quaking aspen	POTRT	starflower	TRIEIN
	red maple	ACRU	brackenfern	PTERI
	red pine	PIRE	misc. perennial grasses	PPGG
			cowwheat	MELAM2
			eastern teaberry	GAPR2
			sweetfern	COPE80
			beaked hazelnut	COCO6
			bigleaf aster	ASMA2
			wild sarsaparilla	ARNU2
Cathro-----	balsam fir	ABBA	common ladyfern	ATFI
	black spruce	PIMA	speckled alder	ALINR
	northern whitecedar	THOC2	redosier dogwood	COSES
	paper birch	BEPA	American starflower	TRBO2
	red maple	ACRU	sphagnum moss	SPHAG*
	tamarack	LALA	northern dewberry	RUFL
	white spruce	PIGL	woodsorrel	OXALI
			naked miterwort	MINU3
			bedstraw	GALIUI
			spinulose woodfern	DRCA11
			goldthread	COPTI
			sedge	CAREX
			rattlesnake fern	BOVI

Soil Survey of Gogebic County, Michigan

Table 9.--Forestland Plant Communities--Continued

Map symbol and soil name	Common trees	Symbol	Characteristic vegetation	Symbol
5173D: Gogebic, sandy substratum-----	American basswood	TIAM	violet	VIOLA
	eastern hemlock	TSCA	common ladyfern	ATFI
	eastern hophornbeam	OSVI	white baneberry	ACPA
	northern red oak	QURU	downy yellow violet	VIPU3
	quaking aspen	POTR5	wild sarsaparilla	ARNU2
	red maple	ACRU	elderberry	SAMBU
	red pine	PIRE	Maryland sanicle	SAMA2
	sugar maple	ACSA3	sweet cicely	OSCL
	white ash	FRAM2	sensitive fern	ONSE
	yellow birch	BEAL2	Canada mayflower	MACA4
			oakfern	GYDR
			Jack in the pulpit	ARTR
			rattlesnake fern	BOVI
			sedge	CAREX
			blue cohosh	CATH2
			yellow beadlily	CLBO3
			spinulose shield fern	DRSP4
			bedstraw	GALIU
Pence-----	balsam fir	ABBA	bigleaf aster	ASMA2
	eastern white pine	PIST	wild sarsaparilla	ARNU2
	northern red oak	QURU	serviceberry	AMELA
	paper birch	BEPA	barren strawberry	WAFR
	quaking aspen	POTRT	blueberry	VACCI
	red maple	ACRU	beaked hazelnut	COCO6
	red pine	PIRE	sweetfern	COPE80
			eastern teaberry	GAPR2
			starflower	TRIEU
			cowwheat	MELAM2
			misc. perennial grasses	PPGG
			brackenfern	PTERI
			lowbush blueberry	VAAN

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7: Histosols-----	60	Very limited Depth to saturated zone Ponding Organic matter content Slow water movement	1.00 1.00 1.00 0.26	Very limited Ponding Depth to saturated zone Organic matter content Slow water movement	1.00 1.00 1.00 0.26	Very limited Depth to saturated zone Organic matter content Ponding Slow water movement	1.00 1.00 1.00 0.26
Aquents-----	40	Not rated		Not rated		Not rated	
10: Witbeck-----	90	Very limited Depth to saturated zone Content of large stones Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Content of large stones Ponding	1.00 1.00 1.00	Very limited Content of large stones Depth to saturated zone Ponding	1.00 1.00 1.00
12A: Monico-----	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
13B: Argonne-----	83	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.01	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.01	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 0.12 0.01
13C: Argonne-----	83	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 0.63 0.01	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 0.63 0.01	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 0.01
13D: Argonne-----	86	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 0.01	Very limited Slope Depth to saturated zone Depth to cemented pan	1.00 1.00 0.01	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 0.01

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
15B: Wabeno-----	100	Very limited Depth to cemented pan Depth to saturated zone	1.00 0.07	Very limited Depth to cemented pan Depth to saturated zone	1.00 0.03	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 0.12 0.07
15C: Wabeno-----	100	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 0.63 0.07	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 0.63 0.03	Very limited Slope Depth to cemented pan Depth to saturated zone	1.00 1.00 0.07
16A: Fence-----	100	Somewhat limited Depth to saturated zone Slow water movement	0.98 0.21	Somewhat limited Depth to saturated zone Slow water movement	0.75 0.21	Somewhat limited Depth to saturated zone Slow water movement	0.98 0.21
17B: Lode-----	85	Not limited		Not limited		Somewhat limited Slope	0.12
17C: Lode-----	86	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
20B: Pence-----	62	Not limited		Not limited		Somewhat limited Slope	0.12
Lode-----	30	Not limited		Not limited		Somewhat limited Slope	0.12
20C: Pence-----	86	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
21: Minocqua-----	60	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Leafriver-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
23B: Chabeneau-----	57	Somewhat limited Depth to saturated zone	0.98	Somewhat limited Depth to saturated zone	0.75	Somewhat limited Depth to saturated zone Content of large stones	0.98 0.03
Karlin-----	28	Not limited		Not limited		Somewhat limited Slope	0.12
Pence-----	15	Not limited		Not limited		Somewhat limited Slope	0.12
26B: Stambaugh-----	90	Not limited		Not limited		Somewhat limited Slope	0.12
27: Lupton-----	50	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Tawas-----	48	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00
28: Dawson-----	40	Very limited Depth to saturated zone Too acid Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too acid Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too acid Ponding	1.00 1.00 1.00
Greenwood-----	35	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Loxley-----	20	Very limited Depth to saturated zone Too acid Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too acid Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too acid Ponding	1.00 1.00 1.00
29B: Pence, very deep water table-----	85	Not limited		Not limited		Somewhat limited Slope	0.12
31: Evart-----	55	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31: Tawas-----	45	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00
32A: Net-----	100	Very limited Depth to saturated zone Depth to cemented pan Content of large stones	1.00 1.00 1.00 0.01	Very limited Depth to saturated zone Depth to cemented pan Content of large stones	1.00 1.00 1.00 0.01	Very limited Depth to saturated zone Depth to cemented pan Content of large stones	1.00 1.00 1.00 0.01
35A: Beechwood-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
36: Gay-----	58	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Pleine-----	30	Very limited Depth to saturated zone Content of large stones Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Content of large stones Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Content of large stones Ponding	1.00 1.00 1.00 1.00
37B: Gogebic-----	51	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 1.00 0.50
Tula-----	31	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.65	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.65	Very limited Depth to saturated zone	1.00
Lupton-----	15	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
38B: Gogebic, sandy substratum-----	95	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.50
38C: Gogebic, sandy substratum-----	95	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00
38D: Gogebic, sandy substratum-----	95	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00
39B: Gogebic, sandy substratum-----	85	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.50
39C: Gogebic, sandy substratum-----	85	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00
39D: Gogebic, sandy substratum-----	85	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00
41: Lupton-----	60	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
41: Pleine-----	23	Very limited Depth to saturated zone Ponding Content of large stones	1.00 1.00 0.42	Very limited Depth to saturated zone Ponding Content of large stones	1.00 1.00 0.42	Very limited Depth to saturated zone Content of large stones Ponding	1.00 1.00 1.00 1.00
Cathro-----	15	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
42: Ausable-----	70	Very limited Depth to saturated zone Flooding	1.00 1.00	Very limited Depth to saturated zone Flooding	1.00 0.40	Very limited Depth to saturated zone Flooding	1.00 1.00
Tawas-----	25	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00
43B: Karlin-----	55	Not limited		Not limited		Somewhat limited Slope	0.50
Pence-----	40	Not limited		Not limited		Somewhat limited Slope	0.50
43C: Karlin-----	55	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Pence-----	40	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
43D: Karlin-----	55	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Pence-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
44B: Karlin-----	36	Not limited		Not limited		Somewhat limited Slope	0.88
Keweenaw-----	30	Not limited		Not limited		Somewhat limited Slope Content of large stones	0.12 0.01
Sarona, dense substratum-----	25	Not limited		Not limited		Somewhat limited Slope	0.88

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
44C:							
Karlin-----	36	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Keweenaw-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope Content of large stones	1.00 0.01
Sarona, dense substratum-----	25	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
44D:							
Karlin-----	36	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Keweenaw-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope Content of large stones	1.00 0.01
Sarona, dense substratum-----	25	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
46C:							
Amasa-----	54	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
Karlin-----	40	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
46D:							
Amasa-----	52	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Karlin-----	38	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
46E:							
Amasa-----	52	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Karlin-----	38	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
46F:							
Amasa-----	53	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Karlin-----	37	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
47B:							
Karlin, very deep water table-----	41	Not limited		Not limited		Somewhat limited Slope	0.12

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
47B: Noseum-----	35	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Depth to saturated zone	0.39
Gay-----	16	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
48C: Karlin-----	75	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Michigamme-----	20	Very limited Slow water movement Slope	1.00 0.16	Very limited Slow water movement Slope	1.00 0.16	Very limited Slope Slow water movement Depth to bedrock	1.00 1.00 0.35
48F: Karlin-----	55	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Michigamme-----	30	Very limited Slope Slow water movement	1.00 1.00	Very limited Slope Slow water movement	1.00 1.00	Very limited Slope Slow water movement Depth to bedrock	1.00 1.00 0.46
49B: Pelissier-----	52	Not limited		Not limited		Somewhat limited Slope	0.12
Sarwet-----	35	Somewhat limited Depth to saturated zone Content of large stones	0.98 0.50	Somewhat limited Depth to saturated zone Content of large stones	0.75 0.50	Somewhat limited Depth to saturated zone Content of large stones Slope	0.98 0.50 0.12
49C: Pelissier-----	50	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Sarwet-----	35	Very limited Slope Depth to saturated zone Content of large stones	1.00 0.98 0.50	Very limited Slope Depth to saturated zone Content of large stones	1.00 0.75 0.50	Very limited Slope Depth to saturated zone Content of large stones	1.00 0.98 0.50
49D: Pelissier-----	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
52B: Pence-----	56	Not limited		Not limited		Somewhat limited Slope	0.50
Vilas-----	35	Not limited		Not limited		Somewhat limited Slope	0.12
52C: Pence-----	56	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Vilas-----	35	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
53B: Manitowish-----	77	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Depth to saturated zone	0.39
Croswell-----	22	Very limited Too sandy Depth to saturated zone	1.00 0.39	Very limited Too sandy Depth to saturated zone	1.00 0.19	Very limited Too sandy Depth to saturated zone Slope	1.00 0.39 0.12
57B: Karlin-----	70	Not limited		Not limited		Somewhat limited Slope	0.50
Manitowish-----	20	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Slope Depth to saturated zone	0.50 0.39
57C: Karlin-----	75	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Manitowish-----	16	Somewhat limited Slope Depth to saturated zone	0.63 0.39	Somewhat limited Slope Depth to saturated zone	0.63 0.19	Very limited Slope Depth to saturated zone	1.00 0.39
58B: Vilas, very deep water table-----	40	Not limited		Not limited		Somewhat limited Slope	0.12
Croswell-----	22	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Depth to saturated zone Slope	0.39 0.12
Pence, very deep water table-----	20	Not limited		Not limited		Somewhat limited Slope	0.12

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
61: Tawas-----	60	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00
Kinross-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00
62B: Pelkie-----	100	Very limited Flooding	1.00	Not limited		Somewhat limited Flooding Slope	0.60 0.12
83: Bowstring-----	90	Very limited Depth to saturated zone Flooding Organic matter content Ponding Slow water movement	1.00 1.00 1.00 1.00 0.15	Very limited Depth to saturated zone Organic matter content Ponding Flooding Slow water movement	1.00 1.00 1.00 0.40 0.15	Very limited Depth to saturated zone Organic matter content Flooding Ponding Slow water movement	1.00 1.00 1.00 1.00 0.15
141D: Oldman-----	80	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	1.00 0.95 0.76 0.63	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	1.00 0.95 0.76 0.63	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	1.00 1.00 0.95 0.76
141E: Oldman-----	80	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	1.00 1.00 0.95 0.76	Very limited Slope Depth to saturated zone Depth to cemented pan Content of large stones	1.00 1.00 0.95 0.76	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	1.00 1.00 0.95 0.76
141F: Porkies-----	80	Very limited Slope Content of large stones	1.00 0.76	Very limited Slope Content of large stones	1.00 0.76	Very limited Slope Content of large stones	1.00 0.76

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
214B: Amnicon-----	60	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 0.88
Bergland-----	30	Very limited Depth to saturated zone Slow water movement Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Slow water movement Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Slow water movement Ponding	1.00 1.00 1.00
216B: Amnicon-----	85	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 0.88
217A: Cuttre-----	85	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Slow water movement	1.00 1.00
218: Bergland-----	80	Very limited Depth to saturated zone Slow water movement Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Slow water movement Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Slow water movement Ponding	1.00 1.00 1.00
219B: Payseor-----	50	Very limited Depth to saturated zone Too clayey Slow water movement	1.00 1.00 1.00	Very limited Too clayey Depth to saturated zone Slow water movement	1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Slow water movement	1.00 1.00 1.00
Froberg-----	40	Very limited Slow water movement Depth to saturated zone	1.00 0.98	Very limited Slow water movement Depth to saturated zone	1.00 0.75	Very limited Slow water movement Depth to saturated zone Slope	1.00 0.98 0.12
222: Matchwood-----	85	Very limited Depth to saturated zone Slow water movement Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Slow water movement Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Slow water movement Ponding	1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
225A: Cuttre-----	50	Very limited Depth to saturated zone Too clayey Slow water movement	1.00 1.00 1.00 1.00	Very limited Too clayey Depth to saturated zone Slow water movement	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Slow water movement	1.00 1.00 1.00 1.00
Bergland-----	40	Very limited Depth to saturated zone Slow water movement Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Slow water movement Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Slow water movement Ponding	1.00 1.00 1.00 1.00
226B: Froberg-----	85	Very limited Too clayey Slow water movement Depth to saturated zone	1.00 1.00 1.00 0.98	Very limited Too clayey Slow water movement Depth to saturated zone	1.00 1.00 1.00 0.75	Very limited Too clayey Slow water movement Depth to saturated zone Slope	1.00 1.00 1.00 0.98 0.12
230B: Moquah-----	55	Very limited Flooding	1.00	Not limited		Not limited	
Arnheim-----	30	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 1.00 0.40	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00 1.00
231: Matchwood-----	45	Very limited Depth to saturated zone Slow water movement Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Slow water movement Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Slow water movement Ponding	1.00 1.00 1.00 1.00
Dorval-----	35	Very limited Depth to saturated zone Gravel content Slow water movement Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Gravel content Slow water movement Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Gravel content Depth to saturated zone Slow water movement Ponding	1.00 1.00 1.00 1.00 1.00
233: Schaat Creek-----	90	Very limited Depth to saturated zone Flooding Slow water movement	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Slow water movement Flooding	1.00 1.00 1.00 0.40	Very limited Depth to saturated zone Flooding Slow water movement	1.00 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
239D: Miskoaki-----	85	Very limited Slope Slow water movement	1.00 1.00	Very limited Slope Slow water movement	1.00 1.00	Very limited Slope Slow water movement	1.00 1.00
277B: Kellogg, sandy substratum-----	50	Somewhat limited Depth to saturated zone Slow water movement	0.98 0.96	Somewhat limited Slow water movement Depth to saturated zone	0.96 0.75	Somewhat limited Depth to saturated zone Slow water movement Slope	0.98 0.96 0.12
Allendale-----	35	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 0.12
280B: Flintsteel-----	85	Very limited Depth to saturated zone Slow water movement	1.00 0.60	Very limited Depth to saturated zone Slow water movement	1.00 0.60	Very limited Depth to saturated zone Slow water movement	1.00 0.60
280C: Flintsteel-----	85	Very limited Depth to saturated zone Slow water movement Slope	1.00 0.60 0.16	Very limited Depth to saturated zone Slow water movement Slope	1.00 0.60 0.16	Very limited Depth to saturated zone Slope Slow water movement	1.00 1.00 0.60
282B: Big Iron-----	70	Very limited Depth to saturated zone Slow water movement	1.00 0.26	Very limited Depth to saturated zone Slow water movement	1.00 0.26	Very limited Depth to saturated zone Slow water movement	1.00 0.26
Flintsteel-----	20	Very limited Depth to saturated zone Slow water movement	1.00 0.60	Very limited Depth to saturated zone Slow water movement	1.00 0.60	Very limited Depth to saturated zone Slow water movement	1.00 0.60
283B: Loggerhead-----	40	Very limited Depth to saturated zone Slow water movement	1.00 0.15	Very limited Depth to saturated zone Slow water movement	1.00 0.15	Very limited Depth to saturated zone Slow water movement Content of large stones	1.00 0.15 0.01

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
283B: Noseum-----	30	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Slope Depth to saturated zone	0.50 0.39
Ubly-----	20	Somewhat limited Slow water movement	0.60	Somewhat limited Slow water movement	0.60	Very limited Slope Slow water movement	1.00 0.60
283C: Loggerhead-----	40	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.16 0.15	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.16 0.15	Very limited Depth to saturated zone Slope Slow water movement Content of large stones	1.00 1.00 1.00 0.15 0.01
Noseum-----	30	Somewhat limited Depth to saturated zone Slope	0.39 0.01	Somewhat limited Depth to saturated zone Slope	0.19 0.01	Very limited Slope Depth to saturated zone	1.00 0.39
Ubly-----	20	Somewhat limited Slow water movement Slope	0.60 0.01	Somewhat limited Slow water movement Slope	0.60 0.01	Very limited Slope Slow water movement	1.00 0.60
284: Aguents-----	55	Not rated		Not rated		Not rated	
Gull Point-----	40	Very limited Depth to saturated zone Flooding Slow water movement	1.00 1.00 0.96	Very limited Depth to saturated zone Slow water movement Flooding	1.00 0.96 0.40	Very limited Depth to saturated zone Flooding Slow water movement	1.00 1.00 0.96
285F: Rockland-----	70	Very limited Slope Slow water movement	1.00 0.26	Very limited Slope Slow water movement	1.00 0.26	Very limited Slope Slow water movement	1.00 0.26
Arnheim-----	15	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00
286A: Big Iron-----	65	Very limited Depth to saturated zone Slow water movement	1.00 0.26	Very limited Depth to saturated zone Slow water movement	1.00 0.26	Very limited Depth to saturated zone Slow water movement	1.00 0.26

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
286A: Belding-----	20	Very limited Depth to saturated zone Slow water movement	1.00 0.21	Very limited Depth to saturated zone Slow water movement	1.00 0.21	Very limited Depth to saturated zone Slow water movement	1.00 0.21
287: Trap Falls-----	55	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 1.00
Tonkey-----	35	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
289B: Amasa-----	95	Not limited		Not limited		Somewhat limited Slope	0.12
290B: Flintsteel-----	80	Very limited Depth to saturated zone Slow water movement	1.00 0.60	Very limited Depth to saturated zone Slow water movement	1.00 0.60	Very limited Depth to saturated zone Slow water movement	1.00 0.60
290C: Flintsteel-----	85	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.63 0.60	Very limited Depth to saturated zone Slope Slow water movement	1.00 0.63 0.60	Very limited Depth to saturated zone Slope Slow water movement	1.00 1.00 0.60
291B: Kalkaska-----	80	Not limited		Not limited		Somewhat limited Slope	0.12
291D: Kalkaska-----	85	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
292B: Manido-----	45	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Depth to saturated zone	0.39
Richter-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Slope	1.00 0.12

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
293A: Wainola-----	55	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Trap Falls-----	25	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 1.00
296B: Manido-----	35	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Depth to saturated zone Slope	0.39 0.12
Fence-----	30	Somewhat limited Depth to saturated zone Slow water movement	0.98 0.21	Somewhat limited Depth to saturated zone Slow water movement	0.75 0.21	Somewhat limited Depth to saturated zone Slow water movement Slope	0.98 0.21 0.12
Gogebic, sandy substratum-----	20	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.12
296D: Manido-----	35	Very limited Slope Depth to saturated zone	1.00 0.39	Very limited Slope Depth to saturated zone	1.00 0.19	Very limited Slope Depth to saturated zone	1.00 0.39
Sporley-----	30	Very limited Slope Slow water movement	1.00 0.22	Very limited Slope Slow water movement	1.00 0.22	Very limited Slope Slow water movement	1.00 0.22
Gogebic, sandy substratum-----	20	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00
299B: Zandi-----	40	Not limited		Not limited		Somewhat limited Slope	0.50
Amasa-----	30	Not limited		Not limited		Somewhat limited Slope	0.12

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
299B: Flintsteel-----	20	Somewhat limited Depth to saturated zone Slow water movement	0.98 0.60	Somewhat limited Depth to saturated zone Slow water movement	0.75 0.60	Somewhat limited Depth to saturated zone Slow water movement	0.98 0.60
299C: Zandi-----	40	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Amasa-----	30	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Flintsteel-----	20	Somewhat limited Depth to saturated zone Slope Slow water movement	0.98 0.63 0.60	Somewhat limited Depth to saturated zone Slope Slow water movement	0.75 0.63 0.60	Very limited Slope Depth to saturated zone Slow water movement	1.00 0.98 0.60
301A: Moodig-----	86	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Content of large stones	1.00 0.01
302B: Manitowish-----	85	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Depth to saturated zone Slope	0.39 0.12
302C: Manitowish-----	85	Somewhat limited Slope Depth to saturated zone	0.63 0.39	Somewhat limited Slope Depth to saturated zone	0.63 0.19	Very limited Slope Depth to saturated zone	1.00 0.39
303: Bowstring-----	50	Very limited Depth to saturated zone Flooding Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding Flooding	1.00 1.00 1.00 0.40	Very limited Depth to saturated zone Organic matter content Flooding Ponding	1.00 1.00 1.00 1.00
Arnheim-----	40	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
305B: Keweenaw-----	45	Not limited		Not limited		Somewhat limited Slope Content of large stones	0.12 0.01
Siskiwit-----	40	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Slope Depth to saturated zone	0.88 0.39
305C: Keweenaw-----	45	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope Content of large stones	1.00 0.01
Siskiwit-----	40	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Very limited Slope Depth to saturated zone	1.00 0.39
307: Lupton-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Cathro-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
309: Cathro-----	85	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
310B: Gogebic-----	92	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.50
310C: Gogebic-----	92	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
310D: Gogebic-----	92	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00
310E: Schweitzer-----	90	Very limited Slope Depth to cemented pan Content of large stones	1.00 0.99 0.76	Very limited Slope Depth to cemented pan Content of large stones	1.00 0.99 0.76	Very limited Slope Content of large stones Depth to cemented pan	1.00 1.00 0.99
311B: Tula-----	45	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.65	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.65	Very limited Depth to saturated zone	1.00
Gogebic-----	40	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.50
312A: Tula-----	35	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.65	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.65	Very limited Depth to saturated zone	1.00
Foxpaw-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Gay-----	25	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
316: Gay-----	85	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
317B: Gogebic-----	95	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.50

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
317C: Gogebic-----	90	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00
317D: Gogebic-----	88	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00
319B: McMillan-----	45	Not limited		Not limited		Somewhat limited Slope	0.12
Noseum-----	40	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Depth to saturated zone	0.39
319C: McMillan-----	45	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Islandlake-----	40	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
319D: McMillan-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Islandlake-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
319E: McMillan-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Islandlake-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
322B: Stutts-----	60	Not limited		Not limited		Somewhat limited Slope	0.12
Keweenaw-----	30	Not limited		Not limited		Somewhat limited Slope Content of large stones	0.12 0.01
322C: Stutts-----	60	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
322C: Keweenaw-----	30	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope Content of large stones	1.00 0.01
322D: Stutts-----	60	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Keweenaw-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope Content of large stones	1.00 0.01
323B: Keweenaw-----	50	Very limited Gravel content	1.00	Very limited Gravel content	1.00	Very limited Gravel content Slope	1.00 0.12
Kalkaska-----	40	Not limited		Not limited		Somewhat limited Slope	0.12
323C: Keweenaw-----	50	Very limited Gravel content Slope	1.00 0.63	Very limited Gravel content Slope	1.00 0.63	Very limited Gravel content Slope	1.00 1.00
Kalkaska-----	40	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
323D: Keweenaw-----	50	Very limited Slope Gravel content	1.00 1.00	Very limited Slope Gravel content	1.00 1.00	Very limited Gravel content Slope	1.00 1.00
Kalkaska-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
325B: Siskiwit-----	55	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Slope Depth to saturated zone	0.88 0.39
Gogebic-----	45	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.12
325C: Siskiwit-----	55	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Very limited Slope Depth to saturated zone	1.00 0.39

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
325C: Gogebic-----	45	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.04	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.04	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00 1.00
327: Foxpaw-----	60	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Sarwet-----	40	Somewhat limited Depth to saturated zone	0.98	Somewhat limited Depth to saturated zone	0.75	Somewhat limited Depth to saturated zone	0.98
328B: Annalake-----	50	Somewhat limited Depth to saturated zone	0.98	Somewhat limited Depth to saturated zone	0.75	Somewhat limited Depth to saturated zone Slope	0.98 0.12
Karlin-----	36	Not limited		Not limited		Somewhat limited Slope	0.50
328C: Annalake-----	50	Somewhat limited Depth to saturated zone Slope	0.98 0.63	Somewhat limited Depth to saturated zone Slope	0.75 0.63	Very limited Slope Depth to saturated zone	1.00 0.98
Karlin-----	40	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
328D: Karlin-----	50	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Zandi-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
329A: Tula-----	90	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.65	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.65	Very limited Depth to saturated zone	1.00
351B: Gogebic-----	85	Very limited Depth to saturated zone Depth to cemented pan Content of large stones	1.00 1.00 0.76	Very limited Depth to saturated zone Depth to cemented pan Content of large stones	1.00 1.00 0.76	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	1.00 1.00 0.76 0.50

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
351C: Gogebic-----	85	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	 1.00 1.00 0.76 0.63	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	 1.00 1.00 0.76 0.63	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	 1.00 1.00 1.00 0.76
351D: Gogebic-----	85	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	 1.00 1.00 1.00 0.76	Very limited Slope Depth to saturated zone Depth to cemented pan Content of large stones	 1.00 1.00 1.00 0.76	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	 1.00 1.00 1.00 0.76
351E: Schweitzer-----	85	Very limited Slope Depth to cemented pan Content of large stones	 1.00 0.99 0.76	Very limited Slope Depth to cemented pan Content of large stones	 1.00 0.99 0.76	Very limited Slope Depth to cemented pan Content of large stones Gravel content	 1.00 0.99 0.76 0.02
351F: Schweitzer-----	90	Very limited Slope Depth to cemented pan Content of large stones	 1.00 0.99 0.76	Very limited Slope Depth to cemented pan Content of large stones	 1.00 0.99 0.76	Very limited Slope Depth to cemented pan Content of large stones Gravel content	 1.00 0.99 0.76 0.02
353A: Tula-----	85	Very limited Depth to saturated zone Depth to cemented pan	 1.00 0.65	Very limited Depth to saturated zone Depth to cemented pan	 1.00 0.65	Very limited Depth to saturated zone	 1.00
354B: Gogebic-----	90	Very limited Depth to saturated zone Depth to cemented pan Content of large stones	 1.00 1.00 0.76	Very limited Depth to saturated zone Depth to cemented pan Content of large stones	 1.00 1.00 0.76	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	 1.00 1.00 0.76 0.50

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
354C: Gogebic-----	90	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	 1.00 1.00 0.76 0.63	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	 1.00 1.00 0.76 0.63	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	 1.00 1.00 1.00 0.76
354D: Gogebic-----	85	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	 1.00 1.00 1.00 0.76	Very limited Slope Depth to saturated zone Depth to cemented pan Content of large stones	 1.00 1.00 1.00 0.76	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	 1.00 1.00 1.00 0.76
354E: Schweitzer-----	85	Very limited Slope Depth to cemented pan Content of large stones	 1.00 0.99 0.76	Very limited Slope Depth to cemented pan Content of large stones	 1.00 0.99 0.76	Very limited Slope Content of large stones Depth to cemented pan	 1.00 1.00 0.99
354F: Schweitzer-----	90	Very limited Slope Depth to cemented pan Content of large stones	 1.00 0.99 0.76	Very limited Slope Depth to cemented pan Content of large stones	 1.00 0.99 0.76	Very limited Slope Content of large stones Depth to cemented pan	 1.00 1.00 0.99
363C: Talus-----	50	Not rated		Not rated		Not rated	
Arcadian-----	35	Very limited Gravel content Depth to bedrock Slope	 1.00 1.00 0.63	Very limited Gravel content Depth to bedrock Slope	 1.00 1.00 0.63	Very limited Gravel content Slope Depth to bedrock	 1.00 1.00 1.00
363D: Talus-----	46	Not rated		Not rated		Not rated	
Arcadian-----	35	Very limited Slope Gravel content Depth to bedrock	 1.00 1.00 1.00	Very limited Slope Gravel content Depth to bedrock	 1.00 1.00 1.00	Very limited Gravel content Slope Depth to bedrock	 1.00 1.00 1.00
363E: Talus-----	50	Not rated		Not rated		Not rated	
Arcadian-----	35	Very limited Slope Gravel content Depth to bedrock	 1.00 1.00 1.00	Very limited Slope Gravel content Depth to bedrock	 1.00 1.00 1.00	Very limited Gravel content Slope Depth to bedrock	 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
363F: Talus-----	50	Not rated		Not rated		Not rated	
Arcadian-----	35	Very limited Slope Gravel content Depth to bedrock	1.00 1.00 1.00	Very limited Slope Gravel content Depth to bedrock	1.00 1.00 1.00	Very limited Gravel content Slope Depth to bedrock	1.00 1.00 1.00
364F: Talus-----	91	Not rated		Not rated		Not rated	
365F: Rock outcrop-----	90	Not rated		Not rated		Not rated	
369C: Dishno-----	35	Somewhat limited Content of large stones Slope Depth to saturated zone	0.76 0.63 0.39	Somewhat limited Content of large stones Slope Depth to saturated zone	0.76 0.63 0.19	Very limited Slope Content of large stones Depth to saturated zone	1.00 0.76 0.39
Gogebic-----	30	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	1.00 1.00 0.76 0.63	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	1.00 1.00 0.76 0.63	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	1.00 1.00 0.76
Peshekee-----	15	Very limited Depth to bedrock Slope Content of large stones	1.00 0.63 0.19	Very limited Depth to bedrock Slope Content of large stones	1.00 0.63 0.19	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
369D: Dishno-----	35	Very limited Slope Content of large stones Depth to saturated zone	1.00 0.76 0.39	Very limited Slope Content of large stones Depth to saturated zone	1.00 0.76 0.19	Very limited Slope Content of large stones Depth to saturated zone	1.00 0.76 0.39
Gogebic-----	30	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	1.00 1.00 1.00 0.76	Very limited Slope Depth to saturated zone Depth to cemented pan Content of large stones	1.00 1.00 1.00 0.76	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	1.00 1.00 1.00 0.76

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
369D: Peshekee-----	15	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 0.19	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 0.19	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
369E: Michigamme-----	30	Very limited Slope Slow water movement Content of large stones	1.00 1.00 0.19	Very limited Slope Slow water movement Content of large stones	1.00 1.00 0.19	Very limited Slope Slow water movement Depth to bedrock Content of large stones	1.00 1.00 0.35 0.19
Schweitzer-----	25	Very limited Slope Depth to cemented pan Content of large stones	1.00 0.99 0.76	Very limited Slope Depth to cemented pan Content of large stones	1.00 0.99 0.76	Very limited Slope Content of large stones Depth to cemented pan	1.00 1.00 0.99
Peshekee-----	20	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 0.19	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 0.19	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
369F: Michigamme-----	30	Very limited Slope Slow water movement Content of large stones	1.00 1.00 0.19	Very limited Slope Slow water movement Content of large stones	1.00 1.00 0.19	Very limited Slope Slow water movement Depth to bedrock Content of large stones	1.00 1.00 0.35 0.19
Schweitzer-----	25	Very limited Slope Depth to cemented pan Content of large stones	1.00 0.99 0.76	Very limited Slope Depth to cemented pan Content of large stones	1.00 0.99 0.76	Very limited Slope Content of large stones Depth to cemented pan	1.00 1.00 0.99
Peshekee-----	20	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 0.19	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 0.19	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
370E: Peshekee-----	55	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 0.19	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 0.19	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 1.00
Rock outcrop-----	40	Not rated		Not rated		Not rated	
370F: Peshekee-----	55	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 0.19	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 0.19	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 1.00
Rock outcrop-----	40	Not rated		Not rated		Not rated	
375: Dumps and Pits, mine-----	95	Not rated		Not rated		Not rated	
380: Beseman-----	55	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Greenwood-----	40	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
382: Cathro-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Arnheim-----	44	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00
388: Gay-----	50	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Tula-----	40	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.65	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.65	Very limited Depth to saturated zone	1.00

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
398B: Tula-----	50	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.65	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.65	Very limited Depth to saturated zone	1.00
Gay-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Wakefield-----	15	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.12
418: Loxley-----	45	Very limited Depth to saturated zone Too acid Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too acid Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too acid Ponding	1.00 1.00 1.00
Beseman-----	41	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
419: Pleine-----	45	Very limited Depth to saturated zone Ponding Content of large stones	1.00 1.00 0.42	Very limited Depth to saturated zone Ponding Content of large stones	1.00 1.00 0.42	Very limited Depth to saturated zone Content of large stones Ponding	1.00 1.00 1.00
Cathro-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Gay-----	25	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
424: Gay-----	85	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
425: Foxpaw-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Gay-----	40	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
428C: Gogebic-----	70	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	1.00 1.00 0.76 0.63	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	1.00 1.00 0.76 0.63	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	1.00 1.00 1.00 0.76
Michigamme-----	25	Very limited Slow water movement Slope Content of large stones	1.00 0.63 0.47	Very limited Slow water movement Slope Content of large stones	1.00 0.63 0.47	Very limited Slow water movement Slope Content of large stones Depth to bedrock	1.00 1.00 0.47 0.46
428D: Gogebic-----	70	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	1.00 1.00 1.00 0.76	Very limited Slope Depth to saturated zone Depth to cemented pan Content of large stones	1.00 1.00 1.00 0.76	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	1.00 1.00 1.00 0.76
Michigamme-----	25	Very limited Slope Slow water movement Content of large stones	1.00 1.00 0.47	Very limited Slope Slow water movement Content of large stones	1.00 1.00 0.47	Very limited Slope Slow water movement Content of large stones Depth to bedrock	1.00 1.00 0.47 0.46
429B: Gogebic-----	79	Very limited Depth to saturated zone Depth to cemented pan Content of large stones	1.00 1.00 0.19	Very limited Depth to saturated zone Depth to cemented pan Content of large stones	1.00 1.00 0.19	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	1.00 1.00 0.19 0.12

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
429B: Peshekee-----	15	Very limited Depth to bedrock Content of large stones	1.00 0.19	Very limited Depth to bedrock Content of large stones	1.00 0.19	Very limited Depth to bedrock Content of large stones Slope	1.00 1.00 0.12
429C: Gogebic-----	79	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	1.00 1.00 0.76 0.63	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	1.00 1.00 0.76 0.63	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	1.00 1.00 1.00 0.76
Peshekee-----	15	Very limited Depth to bedrock Slope Content of large stones	1.00 0.63 0.19	Very limited Depth to bedrock Slope Content of large stones	1.00 0.63 0.19	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 1.00
429D: Gogebic-----	75	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	1.00 1.00 1.00 0.76	Very limited Slope Depth to saturated zone Depth to cemented pan Content of large stones	1.00 1.00 1.00 0.76	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	1.00 1.00 1.00 0.76
Peshekee-----	15	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 0.19	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 0.19	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 1.00
429E: Schweitzer-----	60	Very limited Slope Depth to cemented pan Content of large stones	1.00 0.99 0.76	Very limited Slope Depth to cemented pan Content of large stones	1.00 0.99 0.76	Very limited Slope Content of large stones Depth to cemented pan	1.00 1.00 0.99
Peshekee-----	35	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 0.19	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 0.19	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 1.00
430B: Stutts-----	90	Not limited		Not limited		Somewhat limited Slope	0.12
430C: Stutts-----	90	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
430D: Stutts-----	90	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
430E: Stutts-----	90	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
432C: Gogebic-----	68	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	1.00 1.00 0.76 0.63	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	1.00 1.00 0.76 0.63	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	1.00 1.00 1.00 0.76
Michigamme-----	15	Very limited Slow water movement Content of large stones Slope	1.00 0.76 0.63	Very limited Slow water movement Content of large stones Slope	1.00 0.76 0.63	Very limited Slope Slow water movement Content of large stones Depth to bedrock	1.00 1.00 0.76 0.35
Rock outcrop-----	15	Not rated		Not rated		Not rated	
432D: Gogebic-----	68	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	1.00 1.00 1.00 0.76	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	1.00 1.00 1.00 0.76	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	1.00 1.00 1.00 0.76
Michigamme-----	15	Very limited Slope Content of large stones	1.00 0.76	Very limited Slope Content of large stones	1.00 0.76	Very limited Slope Content of large stones Depth to bedrock	1.00 0.76 0.35
Rock outcrop-----	15	Not rated		Not rated		Not rated	
432E: Schweitzer-----	45	Very limited Slope Depth to cemented pan Content of large stones	1.00 0.99 0.76	Very limited Slope Depth to cemented pan Content of large stones	1.00 0.99 0.76	Very limited Slope Content of large stones Depth to cemented pan	1.00 1.00 0.99
Michigamme-----	20	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope Depth to bedrock	1.00 0.46
Rock outcrop-----	20	Not rated		Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
432F: Schweitzer-----	45	Very limited Slope Depth to cemented pan Content of large stones	1.00 0.99 0.76	Very limited Slope Depth to cemented pan Content of large stones	1.00 0.99 0.76	Very limited Slope Content of large stones Depth to cemented pan	1.00 1.00 0.99
Michigamme-----	20	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope Depth to bedrock	1.00 0.46
Rock outcrop-----	20	Not rated		Not rated		Not rated	
433B: McMillan-----	85	Not limited		Not limited		Somewhat limited Slope	0.12
433C: McMillan-----	85	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
433D: McMillan-----	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
435C: Kalkaska-----	45	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
Waiska-----	40	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
435D: Kalkaska-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Waiska-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
435E: Kalkaska-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Waiska-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
437B: Manitowish-----	65	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Depth to saturated zone	0.39
Channing-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
448F: Rockland-----	75	Very limited Slope Slow water movement	1.00 0.26	Very limited Slope Slow water movement	1.00 0.26	Very limited Slope Slow water movement	1.00 0.26
Rock outcrop-----	25	Not rated		Not rated		Not rated	
449C: Flintsteel-----	70	Somewhat limited Depth to saturated zone Slope Slow water movement	0.98 0.63 0.60	Somewhat limited Depth to saturated zone Slope Slow water movement	0.75 0.63 0.60	Very limited Slope Depth to saturated zone Slow water movement	1.00 0.98 0.60
Minocqua-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
452F: Rockland-----	90	Very limited Slope Slow water movement	1.00 0.26	Very limited Slope Slow water movement	1.00 0.26	Very limited Slope Slow water movement	1.00 0.26
460B: Belding-----	55	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Slow water movement	1.00 1.00
Manido-----	25	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Depth to saturated zone Slope	0.39 0.12
461B: Loggerhead-----	85	Very limited Depth to saturated zone Slow water movement	1.00 0.15	Very limited Depth to saturated zone Slow water movement	1.00 0.15	Very limited Depth to saturated zone Slow water movement Content of large stones	1.00 0.15 0.01
462C: Nonesuch-----	75	Somewhat limited Depth to saturated zone Depth to cemented pan Slope	0.98 0.95 0.04	Somewhat limited Depth to cemented pan Depth to saturated zone Slope	0.95 0.75 0.04	Very limited Slope Depth to saturated zone Depth to cemented pan Depth to bedrock	1.00 0.98 0.95 0.16
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
509: Cathro-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Minocqua-----	40	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
511A: Gogebic-----	40	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 1.00 0.50
Tula-----	30	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.65	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.65	Very limited Depth to saturated zone	1.00
Chabeneau-----	15	Somewhat limited Depth to saturated zone	0.98	Somewhat limited Depth to saturated zone	0.75	Somewhat limited Depth to saturated zone Content of large stones	0.98 0.03
519B: Gogebic-----	50	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 1.00 0.12
Karlin-----	40	Not limited		Not limited		Somewhat limited Slope	0.12
519C: Gogebic-----	50	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00
Karlin-----	40	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
519D: Gogebic-----	50	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
519D: Karlin-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
522: Pits, sand and gravel-----	100	Not rated		Not rated		Not rated	
523D: Gogebic, sandy substratum-----	53	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00
Karlin-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
524C: Waika-----	45	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Amasa-----	40	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
524D: Waika-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Amasa-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
524E: Waika-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Amasa-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
527B: Wakefield-----	85	Very limited Depth to saturated zone Depth to cemented pan Content of large stones	1.00 1.00 0.04	Very limited Depth to saturated zone Depth to cemented pan Content of large stones	1.00 1.00 0.04	Very limited Depth to saturated zone Depth to cemented pan Slope Content of large stones	1.00 1.00 0.12 0.04
527C: Wakefield-----	85	Very limited Depth to saturated zone Depth to cemented pan Slope Content of large stones	1.00 1.00 0.63 0.04	Very limited Depth to saturated zone Depth to cemented pan Slope Content of large stones	1.00 1.00 0.63 0.04	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	1.00 1.00 1.00 1.00 0.04

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
527D: Wakefield-----	85	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	 1.00 1.00 1.00 0.04	Very limited Slope Depth to saturated zone Depth to cemented pan Content of large stones	 1.00 1.00 1.00 0.04	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	 1.00 1.00 1.00 0.04
528B: Gogebic-----	48	Very limited Depth to saturated zone Depth to cemented pan	 1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan	 1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan Slope	 1.00 1.00 0.12
Annalake-----	45	Somewhat limited Depth to saturated zone	 0.98	Somewhat limited Depth to saturated zone	 0.75	Somewhat limited Depth to saturated zone Slope	 0.98 0.12
528C: Gogebic-----	48	Very limited Depth to saturated zone Depth to cemented pan Slope	 1.00 1.00 0.63	Very limited Depth to saturated zone Depth to cemented pan Slope	 1.00 1.00 0.63	Very limited Depth to saturated zone Slope Depth to cemented pan	 1.00 1.00 1.00
Annalake-----	45	Somewhat limited Depth to saturated zone Slope	 0.98 0.63	Somewhat limited Depth to saturated zone Slope	 0.75 0.63	Very limited Slope Depth to saturated zone	 1.00 0.98
528D: Gogebic-----	48	Very limited Depth to saturated zone Slope Depth to cemented pan	 1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to cemented pan	 1.00 1.00 1.00	Very limited Depth to saturated zone Slope Depth to cemented pan	 1.00 1.00 1.00
Annalake-----	45	Very limited Slope Depth to saturated zone	 1.00 0.98	Very limited Slope Depth to saturated zone	 1.00 0.75	Very limited Slope Depth to saturated zone	 1.00 0.98
551B: Gogebic-----	65	Very limited Depth to saturated zone Depth to cemented pan Content of large stones	 1.00 1.00 0.76	Very limited Depth to saturated zone Depth to cemented pan Content of large stones	 1.00 1.00 0.76	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	 1.00 1.00 0.76 0.50

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
551B: Dishno-----	30	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Depth to saturated zone Slope	0.39 0.12
566: Beach, rubbly-----	95	Not rated		Not rated		Not rated	
576B: Flintsteel-----	45	Somewhat limited Depth to saturated zone Slow water movement	0.98 0.60	Somewhat limited Depth to saturated zone Slow water movement	0.75 0.60	Somewhat limited Depth to saturated zone Slow water movement	0.98 0.60
Loggerhead-----	40	Somewhat limited Depth to saturated zone Slow water movement	0.98 0.15	Somewhat limited Depth to saturated zone Slow water movement	0.75 0.15	Somewhat limited Depth to saturated zone Slow water movement Content of large stones	0.98 0.15 0.01
576C: Flintsteel-----	45	Somewhat limited Depth to saturated zone Slow water movement Slope	0.98 0.60 0.16	Somewhat limited Depth to saturated zone Slow water movement Slope	0.75 0.60 0.16	Very limited Slope Depth to saturated zone Slow water movement	1.00 0.98 0.60
Loggerhead-----	40	Somewhat limited Depth to saturated zone Slope Slow water movement	0.98 0.16 0.15	Somewhat limited Depth to saturated zone Slope Slow water movement	0.75 0.16 0.15	Very limited Slope Depth to saturated zone Slow water movement Content of large stones	1.00 0.98 0.15 0.01
576D: Flintsteel-----	45	Very limited Slope Depth to saturated zone Slow water movement	1.00 0.98 0.60	Very limited Slope Depth to saturated zone Slow water movement	1.00 0.75 0.60	Very limited Slope Depth to saturated zone Slow water movement	1.00 0.98 0.60
Loggerhead-----	40	Very limited Slope Depth to saturated zone Slow water movement	1.00 0.98 0.15	Very limited Slope Depth to saturated zone Slow water movement	1.00 0.75 0.15	Very limited Slope Depth to saturated zone Slow water movement Content of large stones	1.00 0.98 0.15 0.01

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
577B: Loggerhead-----	35	Somewhat limited Depth to saturated zone Slow water movement	0.98 0.15	Somewhat limited Depth to saturated zone Slow water movement	0.75 0.15	Somewhat limited Depth to saturated zone Slow water movement Content of large stones	0.98 0.15 0.01
Chabeneau-----	30	Somewhat limited Depth to saturated zone	0.98	Somewhat limited Depth to saturated zone	0.75	Somewhat limited Depth to saturated zone Slope Content of large stones	0.98 0.50 0.03
Arcadian-----	25	Very limited Gravel content Depth to bedrock	1.00 1.00	Very limited Gravel content Depth to bedrock	1.00 1.00	Very limited Gravel content Depth to bedrock Slope	1.00 1.00 0.12
577C: Loggerhead-----	35	Somewhat limited Depth to saturated zone Slope Slow water movement	0.98 0.16 0.15	Somewhat limited Depth to saturated zone Slope Slow water movement	0.75 0.16 0.15	Very limited Slope Depth to saturated zone Slow water movement Content of large stones	1.00 0.98 0.15 0.01
Chabeneau-----	30	Somewhat limited Depth to saturated zone	0.98	Somewhat limited Depth to saturated zone	0.75	Very limited Slope Depth to saturated zone Content of large stones	1.00 0.98 0.03
Arcadian-----	25	Very limited Gravel content Depth to bedrock Slope	1.00 1.00 0.63	Very limited Gravel content Depth to bedrock Slope	1.00 1.00 0.63	Very limited Gravel content Slope Depth to bedrock	1.00 1.00 1.00
577D: Loggerhead-----	35	Very limited Slope Depth to saturated zone Slow water movement	1.00 0.98 0.15	Very limited Slope Depth to saturated zone Slow water movement	1.00 0.75 0.15	Very limited Slope Depth to saturated zone Slow water movement Content of large stones	1.00 0.98 0.15 0.01
Chabeneau-----	30	Very limited Slope Depth to saturated zone	1.00 0.98	Very limited Slope Depth to saturated zone	1.00 0.75	Very limited Slope Depth to saturated zone Content of large stones	1.00 0.98 0.03

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
577D: Arcadian-----	25	Very limited Slope Gravel content Depth to bedrock	 1.00 1.00 1.00	Very limited Slope Gravel content Depth to bedrock	 1.00 1.00 1.00	Very limited Gravel content Slope Depth to bedrock	 1.00 1.00 1.00
578D: Arcadian-----	59	Very limited Gravel content Slope Depth to bedrock	 1.00 1.00 1.00	Very limited Gravel content Slope Depth to bedrock	 1.00 1.00 1.00	Very limited Gravel content Slope Depth to bedrock	 1.00 1.00 1.00
Keweenaw-----	40	Very limited Gravel content Slope	 1.00 1.00	Very limited Gravel content Slope	 1.00 1.00	Very limited Gravel content Slope	 1.00 1.00
625B: Fence-----	95	Somewhat limited Depth to saturated zone Slow water movement	 0.98 0.21	Somewhat limited Depth to saturated zone Slow water movement	 0.75 0.21	Somewhat limited Depth to saturated zone Slow water movement Slope	 0.98 0.21 0.12
625C: Fence-----	98	Somewhat limited Depth to saturated zone Slope Slow water movement	 0.98 0.63 0.21	Somewhat limited Depth to saturated zone Slope Slow water movement	 0.75 0.63 0.21	Very limited Slope Depth to saturated zone Slow water movement	 1.00 0.98 0.21
626D: Sporley-----	85	Very limited Slope Slow water movement	 1.00 0.22	Very limited Slope Slow water movement	 1.00 0.22	Very limited Slope Slow water movement	 1.00 0.22
626E: Sporley-----	90	Very limited Slope Slow water movement	 1.00 0.22	Very limited Slope Slow water movement	 1.00 0.22	Very limited Slope Slow water movement	 1.00 0.22
648B: Annalake-----	93	Somewhat limited Depth to saturated zone	 0.98	Somewhat limited Depth to saturated zone	 0.75	Somewhat limited Depth to saturated zone Slope	 0.98 0.12
648C: Annalake-----	93	Somewhat limited Depth to saturated zone Slope	 0.98 0.63	Somewhat limited Depth to saturated zone Slope	 0.75 0.63	Very limited Slope Depth to saturated zone	 1.00 0.98

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
650: Leafriver-----	90	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
652B: Manido-----	52	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Depth to saturated zone Slope	0.39 0.12
Annalake-----	24	Somewhat limited Depth to saturated zone	0.98	Somewhat limited Depth to saturated zone	0.75	Somewhat limited Depth to saturated zone Slope	0.98 0.12
656B: Stutts-----	60	Not limited		Not limited		Somewhat limited Slope	0.12
Zandi-----	30	Not limited		Not limited		Somewhat limited Slope	0.12
656C: Stutts-----	60	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Zandi-----	30	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
656D: Stutts-----	60	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Zandi-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
680B: Tonkey-----	37	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Pleine-----	32	Very limited Depth to saturated zone Ponding Content of large stones	1.00 1.00 0.76	Very limited Depth to saturated zone Ponding Content of large stones	1.00 1.00 0.76	Very limited Depth to saturated zone Content of large stones Ponding	1.00 1.00 1.00
Annalake-----	20	Somewhat limited Depth to saturated zone	0.98	Somewhat limited Depth to saturated zone	0.75	Somewhat limited Depth to saturated zone	0.98

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
681: Cathro-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Tonkey-----	37	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
683B: Amasa-----	45	Not limited		Not limited		Somewhat limited Slope	0.12
Oldman-----	40	Very limited Depth to saturated zone Depth to cemented pan Content of large stones	1.00 0.95 0.76	Very limited Depth to saturated zone Depth to cemented pan Content of large stones	1.00 0.95 0.76	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	1.00 0.95 0.76 0.12
683C: Amasa-----	45	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Oldman-----	40	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	1.00 0.95 0.76 0.63	Very limited Depth to saturated zone Depth to cemented pan Content of large stones Slope	1.00 0.95 0.76 0.63	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	1.00 1.00 0.95 0.76
683D: Amasa-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Oldman-----	40	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	1.00 1.00 0.95 0.76	Very limited Slope Depth to saturated zone Depth to cemented pan Content of large stones	1.00 1.00 0.95 0.76	Very limited Depth to saturated zone Slope Depth to cemented pan Content of large stones	1.00 1.00 0.95 0.76
684B: Amasa-----	70	Not limited		Not limited		Somewhat limited Slope	0.50
684C: Amasa-----	78	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
684D: Amasa-----	78	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
686B: Annalake-----	40	Somewhat limited Depth to saturated zone	0.98	Somewhat limited Depth to saturated zone	0.75	Somewhat limited Depth to saturated zone Slope	0.98 0.12
Robago-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
688: Cathro-----	60	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00
Leafriver-----	40	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00
689B: Chabeneau-----	35	Somewhat limited Depth to saturated zone	0.98	Somewhat limited Depth to saturated zone	0.75	Somewhat limited Depth to saturated zone Content of large stones	0.98 0.03
Channing-----	30	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Gogebic-----	25	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.50
691B: Dishno-----	35	Somewhat limited Depth to saturated zone	0.39	Somewhat limited Depth to saturated zone	0.19	Somewhat limited Depth to saturated zone Slope	0.39 0.12
Tula-----	30	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.65	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.65	Very limited Depth to saturated zone	1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
691D: Dishno-----	35	Very limited Slope Depth to saturated zone	1.00 0.39	Very limited Slope Depth to saturated zone	1.00 0.19	Very limited Slope Depth to saturated zone	1.00 0.39
Tula-----	30	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.65	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.65	Very limited Depth to saturated zone	1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
693B: Chabeneau-----	50	Somewhat limited Depth to saturated zone	0.98	Somewhat limited Depth to saturated zone	0.75	Somewhat limited Depth to saturated zone Content of large stones	0.98 0.03
Annalake-----	40	Somewhat limited Depth to saturated zone	0.98	Somewhat limited Depth to saturated zone	0.75	Somewhat limited Depth to saturated zone Slope	0.98 0.12
694D: Annalake-----	40	Very limited Slope Depth to saturated zone	1.00 0.98	Very limited Slope Depth to saturated zone	1.00 0.75	Very limited Slope Depth to saturated zone	1.00 0.98
Stutts-----	35	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Arnheim-----	25	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 0.40	Very limited Depth to saturated zone Flooding Ponding	1.00 1.00 1.00
5170: Minocqua-----	50	Very limited Depth to saturated zone Ponding Content of large stones	1.00 1.00 0.50	Very limited Depth to saturated zone Ponding Content of large stones	1.00 1.00 0.50	Very limited Depth to saturated zone Ponding Content of large stones	1.00 1.00 0.50
Pleine-----	30	Very limited Depth to saturated zone Ponding Content of large stones	1.00 1.00 0.50	Very limited Depth to saturated zone Ponding Content of large stones	1.00 1.00 0.50	Very limited Depth to saturated zone Content of large stones Ponding	1.00 1.00 1.00
Cathro-----	15	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
5171B: Tula-----	60	Very limited Depth to saturated zone Depth to cemented pan Content of large stones	1.00 0.65 0.50	Very limited Depth to saturated zone Depth to cemented pan Content of large stones	1.00 0.65 0.50	Very limited Depth to saturated zone Content of large stones	1.00 0.50
Wormet-----	15	Very limited Depth to saturated zone Content of large stones	1.00 0.50	Very limited Depth to saturated zone Content of large stones	1.00 0.50	Very limited Depth to saturated zone Content of large stones	1.00 0.50
Gogebic, sandy substratum-----	15	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.50
5172B: Gogebic, sandy substratum-----	60	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.50
Pence-----	15	Somewhat limited Content of large stones	0.50	Somewhat limited Content of large stones	0.50	Somewhat limited Content of large stones Slope	0.50 0.12
Cathro-----	15	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
5172C: Gogebic, sandy substratum-----	60	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Depth to cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 1.00 1.00
Pence-----	15	Somewhat limited Slope Content of large stones	0.63 0.50	Somewhat limited Slope Content of large stones	0.63 0.50	Very limited Slope Content of large stones	1.00 0.50
Cathro-----	15	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10a.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
5172D: Gogebic, sandy substratum-----	60	Very limited		Very limited		Very limited	
		Depth to	1.00	Slope	1.00	Depth to	1.00
		saturated zone		Depth to	1.00	saturated zone	
		Slope	1.00	saturated zone		Slope	1.00
		Depth to cemented	1.00	Depth to cemented	1.00	Depth to cemented	1.00
		pan		pan		pan	
Pence-----	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large	0.50	Content of large	0.50	Content of large	0.50
		stones		stones		stones	
Cathro-----	15	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
5173D: Gogebic, sandy substratum-----	60	Very limited		Very limited		Very limited	
		Depth to	1.00	Slope	1.00	Depth to	1.00
		saturated zone		Depth to	1.00	saturated zone	
		Slope	1.00	saturated zone		Slope	1.00
		Depth to cemented	1.00	Depth to cemented	1.00	Depth to cemented	1.00
		pan		pan		pan	
Pence-----	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large	0.50	Content of large	0.50	Content of large	0.50
		stones		stones		stones	

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Table 10b.--Recreational Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
7: Histosols-----	60	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Ponding Organic matter content Depth to saturated zone	1.00 1.00 1.00
Aquents-----	40	Not rated		Not rated	
10: Witbeck-----	90	Very limited Depth to saturated zone Content of large stones Ponding	1.00 1.00 1.00	Very limited Content of large stones Depth to saturated zone Ponding	1.00 1.00 1.00
12A: Monico-----	100	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
13B: Argonne-----	83	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan	1.00 0.01
13C: Argonne-----	83	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Slope Depth to cemented pan	1.00 0.63 0.01
13D: Argonne-----	86	Very limited Depth to saturated zone Slope	1.00 1.00	Very limited Slope Depth to saturated zone Depth to cemented pan	1.00 1.00 0.01
15B: Wabeno-----	100	Not limited		Very limited Depth to cemented pan Droughty Depth to saturated zone	1.00 0.99 0.03

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
15C: Wabeno-----	100	Not limited		Very limited Depth to cemented pan	1.00
				Droughty	0.99
				Slope	0.63
				Depth to saturated zone	0.03
16A: Fence-----	100	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.75
17B: Lode-----	85	Not limited		Not limited	
17C: Lode-----	86	Very limited Water erosion	1.00	Somewhat limited Slope	0.63
20B: Pence-----	62	Not limited		Somewhat limited Droughty	0.10
Lode-----	30	Not limited		Not limited	
20C: Pence-----	86	Not limited		Somewhat limited Slope	0.63
				Droughty	0.10
21: Minocqua-----	60	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Leafriver-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Droughty Ponding	1.00 1.00 1.00
23B: Chabeneau-----	57	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone Content of large stones	0.75 0.03
Karlin-----	28	Not limited		Not limited	
Pence-----	15	Not limited		Somewhat limited Droughty	0.10
26B: Stambaugh-----	90	Not limited		Not limited	

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Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
27:					
Lupton-----	50	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Ponding	1.00	Ponding	1.00
Tawas-----	48	Very limited		Very limited	
		Depth to	1.00	Organic matter	1.00
		saturated zone		content	
		Organic matter	1.00	Depth to	1.00
		content		saturated zone	
		Ponding	1.00	Ponding	1.00
28:					
Dawson-----	40	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Ponding	1.00	Too acid	1.00
				Ponding	1.00
Greenwood-----	35	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Ponding	1.00	Ponding	1.00
Loxley-----	20	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Ponding	1.00	Too acid	1.00
				Ponding	1.00
29B:					
Pence, very deep					
water table-----	85	Not limited		Somewhat limited	
				Droughty	0.09
31:					
Evart-----	55	Very limited		Very limited	
		Depth to	1.00	Flooding	1.00
		saturated zone		Depth to	1.00
		Ponding	1.00	saturated zone	
		Flooding	0.40	Ponding	1.00
				Droughty	0.11
Tawas-----	45	Very limited		Very limited	
		Depth to	1.00	Organic matter	1.00
		saturated zone		content	
		Organic matter	1.00	Depth to	1.00
		content		saturated zone	
		Ponding	1.00	Ponding	1.00
32A:					
Net-----	100	Very limited		Very limited	
		Depth to	1.00	Depth to cemented	1.00
		saturated zone		pan	
		Content of large	0.01	Depth to	1.00
		stones		saturated zone	
				Droughty	0.08
				Content of large	0.01
				stones	

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
35A: Beechwood-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
36: Gay-----	58	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Pleine-----	30	Very limited Depth to saturated zone Content of large stones Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Content of large stones Ponding	1.00 1.00 1.00
37B: Gogebic-----	51	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 0.05
Tula-----	31	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 0.64 0.01
Lupton-----	15	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
38B: Gogebic, sandy substratum-----	95	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 0.05
38C: Gogebic, sandy substratum-----	95	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Slope Droughty	1.00 1.00 0.63 0.05

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
38D: Gogebic, sandy substratum-----	95	Very limited Depth to saturated zone Slope	1.00 0.82	Very limited Slope Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 1.00 0.05
39B: Gogebic, sandy substratum-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 0.05
39C: Gogebic, sandy substratum-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Slope Droughty	1.00 1.00 0.63 0.05
39D: Gogebic, sandy substratum-----	85	Very limited Depth to saturated zone Slope	1.00 0.82	Very limited Slope Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 1.00 0.05
41: Lupton-----	60	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Pleine-----	23	Very limited Depth to saturated zone Ponding Content of large stones	1.00 1.00 0.42	Very limited Depth to saturated zone Content of large stones Ponding	1.00 1.00 1.00
Cathro-----	15	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
42:					
Ausable-----	70	Very limited		Very limited	
		Depth to	1.00	Flooding	1.00
		saturated zone		Depth to	1.00
		Flooding	0.40	saturated zone	
Tawas-----	25	Very limited		Very limited	
		Depth to	1.00	Organic matter	1.00
		saturated zone		content	
		Organic matter	1.00	Depth to	1.00
		content		saturated zone	
		Ponding	1.00	Ponding	1.00
43B:					
Karlin-----	55	Not limited		Not limited	
Pence-----	40	Not limited		Somewhat limited	
				Droughty	0.10
43C:					
Karlin-----	55	Not limited		Somewhat limited	
				Slope	0.63
Pence-----	40	Not limited		Somewhat limited	
				Slope	0.63
				Droughty	0.10
43D:					
Karlin-----	55	Somewhat limited		Very limited	
		Slope	0.82	Slope	1.00
Pence-----	40	Somewhat limited		Very limited	
		Slope	0.82	Slope	1.00
				Droughty	0.10
44B:					
Karlin-----	36	Not limited		Not limited	
Keweenaw-----	30	Not limited		Somewhat limited	
				Droughty	0.81
				Content of large	0.01
				stones	
Sarona, dense substratum-----	25	Not limited		Not limited	
44C:					
Karlin-----	36	Somewhat limited		Very limited	
		Slope	0.02	Slope	1.00
Keweenaw-----	30	Somewhat limited		Very limited	
		Slope	0.02	Slope	1.00
				Droughty	0.81
				Content of large	0.01
				stones	
Sarona, dense substratum-----	25	Not limited		Somewhat limited	
				Slope	0.16

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
44D:					
Karlin-----	36	Very limited Slope	1.00	Very limited Slope	1.00
Keweenaw-----	30	Very limited Slope	1.00	Very limited Slope Droughty Content of large stones	1.00 0.81 0.01
Sarona, dense substratum-----	25	Very limited Slope	1.00	Very limited Slope	1.00
46C:					
Amasa-----	54	Not limited		Somewhat limited Slope	0.16
Karlin-----	40	Not limited		Somewhat limited Slope	0.16
46D:					
Amasa-----	52	Very limited Slope	1.00	Very limited Slope	1.00
Karlin-----	38	Very limited Slope	1.00	Very limited Slope	1.00
46E:					
Amasa-----	52	Very limited Slope	1.00	Very limited Slope	1.00
Karlin-----	38	Very limited Slope	1.00	Very limited Slope	1.00
46F:					
Amasa-----	53	Very limited Slope	1.00	Very limited Slope	1.00
Karlin-----	37	Very limited Slope	1.00	Very limited Slope	1.00
47B:					
Karlin, very deep water table-----	41	Not limited		Not limited	
Noseum-----	35	Not limited		Somewhat limited Depth to saturated zone	0.19
Gay-----	16	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
48C:					
Karlin-----	75	Somewhat limited Slope	0.18	Very limited Slope	1.00

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
48C: Michigamme-----	20	Not limited		Somewhat limited Depth to bedrock Slope	0.35 0.16
48F: Karlin-----	55	Very limited Slope	1.00	Very limited Slope	1.00
Michigamme-----	30	Very limited Slope	1.00	Very limited Slope Depth to bedrock	1.00 0.46
49B: Pelissier-----	52	Not limited		Somewhat limited Droughty	0.71
Sarwet-----	35	Somewhat limited Content of large stones Depth to saturated zone	0.50 0.44	Somewhat limited Depth to saturated zone	0.75
49C: Pelissier-----	50	Not limited		Very limited Slope Droughty	1.00 0.71
Sarwet-----	35	Somewhat limited Content of large stones Depth to saturated zone	0.50 0.44	Very limited Slope Depth to saturated zone	1.00 0.75
49D: Pelissier-----	85	Very limited Slope	1.00	Very limited Slope Droughty	1.00 0.71
52B: Pence-----	56	Not limited		Somewhat limited Droughty	0.10
Vilas-----	35	Not limited		Somewhat limited Droughty	0.08
52C: Pence-----	56	Not limited		Somewhat limited Slope Droughty	0.63 0.10
Vilas-----	35	Not limited		Somewhat limited Slope Droughty	0.63 0.08
53B: Manitowish-----	77	Not limited		Somewhat limited Depth to saturated zone	0.19

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
53B: Croswell-----	22	Very limited Too sandy	1.00	Somewhat limited Droughty Too sandy Depth to saturated zone	0.68 0.50 0.19
57B: Karlin-----	70	Not limited		Not limited	
Manitowish-----	20	Not limited		Somewhat limited Depth to saturated zone	0.19
57C: Karlin-----	75	Not limited		Somewhat limited Slope	0.63
Manitowish-----	16	Not limited		Somewhat limited Slope Depth to saturated zone	0.63 0.19
58B: Vilas, very deep water table-----	40	Not limited		Somewhat limited Droughty	0.08
Croswell-----	22	Not limited		Somewhat limited Droughty Too sandy Depth to saturated zone	0.68 0.50 0.19
Pence, very deep water table-----	20	Not limited		Somewhat limited Droughty	0.10
61: Tawas-----	60	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00	Very limited Organic matter content Depth to saturated zone Ponding	1.00 1.00 1.00
Kinross-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
62B: Pelkie-----	100	Not limited		Somewhat limited Droughty Flooding	0.69 0.60

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
83: Bowstring-----	90	Very limited Depth to saturated zone Organic matter content Ponding Flooding	 1.00 1.00 1.00 0.40	Very limited Flooding Organic matter content Depth to saturated zone Ponding	 1.00 1.00 1.00 1.00
141D: Oldman-----	80	Very limited Depth to saturated zone Content of large stones	 1.00 0.76	Very limited Depth to saturated zone Depth to cemented pan Droughty Slope	 1.00 0.95 0.74 0.63
141E: Oldman-----	80	Very limited Depth to saturated zone Content of large stones Slope	 1.00 0.76 0.32	Very limited Slope Depth to saturated zone Depth to cemented pan Droughty	 1.00 1.00 0.95 0.74
141F: Porkies-----	80	Very limited Slope Content of large stones	 1.00 0.76	Very limited Slope	 1.00
214B: Amnicon-----	60	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone	 1.00
Bergland-----	30	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
216B: Amnicon-----	85	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone	 1.00
217A: Cuttre-----	85	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone	 1.00
218: Bergland-----	80	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
219B: Payseor-----	50	Very limited Depth to saturated zone Too clayey	1.00 1.00	Very limited Too clayey Depth to saturated zone	1.00 1.00
Froberg-----	40	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.75
222: Matchwood-----	85	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
225A: Cuttre-----	50	Very limited Depth to saturated zone Too clayey	1.00 1.00	Very limited Too clayey Depth to saturated zone	1.00 1.00
Bergland-----	40	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
226B: Froberg-----	85	Very limited Too clayey Depth to saturated zone	1.00 0.44	Very limited Too clayey Depth to saturated zone	1.00 0.75
230B: Moquah-----	55	Not limited		Not limited	
Arnheim-----	30	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 1.00 0.40	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00
231: Matchwood-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Dorval-----	35	Very limited Gravel content Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Gravel content Depth to saturated zone Ponding	1.00 1.00 1.00
233: Schaat Creek-----	90	Very limited Depth to saturated zone Flooding	1.00 0.40	Very limited Flooding Depth to saturated zone	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
239D: Miskoaki-----	85	Somewhat limited Slope	0.50	Very limited Slope	1.00
277B: Kellogg, sandy substratum-----	50	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.75
Allendale-----	35	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
280B: Flintsteel-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
280C: Flintsteel-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Slope	1.00 0.16
282B: Big Iron-----	70	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Flintsteel-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
283B: Loggerhead-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Content of large stones	1.00 0.01
Noseum-----	30	Not limited		Somewhat limited Depth to saturated zone	0.19
Ubly-----	20	Not limited		Not limited	
283C: Loggerhead-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Slope Content of large stones	1.00 0.16 0.01

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
283C: Noseum-----	30	Not limited		Somewhat limited Depth to saturated zone	0.19
				Slope	0.01
Ugly-----	20	Not limited		Somewhat limited Slope	0.01
284: Aguents-----	55	Not rated		Not rated	
Gull Point-----	40	Very limited Depth to saturated zone	1.00	Very limited Flooding	1.00
		Flooding	0.40	Depth to saturated zone	1.00
285F: Rockland-----	70	Very limited Slope	1.00	Very limited Slope	1.00
Arnheim-----	15	Very limited Depth to saturated zone	1.00	Very limited Flooding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Flooding	0.40	Ponding	1.00
286A: Big Iron-----	65	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Belding-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
287: Trap Falls-----	55	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
Tonkey-----	35	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
289B: Amasa-----	95	Not limited		Not limited	
290B: Flintsteel-----	80	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
290C: Flintsteel-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
				Slope	0.63

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
291B: Kalkaska-----	80	Not limited		Somewhat limited Droughty	0.28
291D: Kalkaska-----	85	Not limited		Somewhat limited Slope Droughty	0.63 0.28
292B: Manido-----	45	Not limited		Somewhat limited Depth to saturated zone	0.19
Richter-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
293A: Wainola-----	55	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Droughty	1.00 0.02
Trap Falls-----	25	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
296B: Manido-----	35	Not limited		Somewhat limited Depth to saturated zone	0.19
Fence-----	30	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.75
Gogebic, sandy substratum-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 0.05
296D: Manido-----	35	Very limited Slope	1.00	Very limited Slope Depth to saturated zone	1.00 0.19
Sporley-----	30	Very limited Water erosion Slope	1.00 1.00	Very limited Slope	1.00

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
296D: Gogebic, sandy substratum-----	20	Very limited Depth to saturated zone Slope	1.00 1.00	Very limited Slope Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 1.00 0.05
299B: Zandi-----	40	Not limited		Not limited	
Amasa-----	30	Not limited		Not limited	
Flintsteel-----	20	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.75
299C: Zandi-----	40	Not limited		Somewhat limited Slope	0.63
Amasa-----	30	Not limited		Somewhat limited Slope	0.63
Flintsteel-----	20	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone Slope	0.75 0.63
301A: Moodig-----	86	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Content of large stones	1.00 0.01
302B: Manitowish-----	85	Not limited		Somewhat limited Depth to saturated zone	0.19
302C: Manitowish-----	85	Not limited		Somewhat limited Slope Depth to saturated zone	0.63 0.19
303: Bowstring-----	50	Very limited Depth to saturated zone Organic matter content Ponding Flooding	1.00 1.00 1.00 0.40	Very limited Flooding Organic matter content Depth to saturated zone Ponding	1.00 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
303: Arnheim-----	40	Very limited Depth to saturated zone Ponding Flooding	 1.00 1.00 0.40	Very limited Flooding Depth to saturated zone Ponding	 1.00 1.00 1.00
305B: Keweenaw-----	45	Not limited		Somewhat limited Droughty Content of large stones	 0.81 0.01
Siskiwit-----	40	Not limited		Somewhat limited Depth to saturated zone	 0.19
305C: Keweenaw-----	45	Not limited		Somewhat limited Droughty Slope Content of large stones	 0.81 0.16 0.01
Siskiwit-----	40	Not limited		Somewhat limited Depth to saturated zone	 0.19
307: Lupton-----	45	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
Cathro-----	45	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
309: Cathro-----	85	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
310B: Gogebic-----	92	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	 1.00 1.00 0.05

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
310C: Gogebic-----	92	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Slope Droughty	1.00 1.00 0.63 0.05
310D: Gogebic-----	92	Very limited Depth to saturated zone Slope	1.00 1.00	Very limited Slope Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 1.00 0.05
310E: Schweitzer-----	90	Very limited Slope Content of large stones	1.00 0.76	Very limited Slope Content of large stones Depth to cemented pan Droughty	1.00 1.00 0.99 0.01
311B: Tula-----	45	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 0.64 0.01
Gogebic-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 0.05
312A: Tula-----	35	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 0.64 0.01
Foxpaw-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Gay-----	25	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
316: Gay-----	85	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
317B: Gogebic-----	95	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 0.05
317C: Gogebic-----	90	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Slope Droughty	1.00 1.00 0.63 0.05
317D: Gogebic-----	88	Very limited Depth to saturated zone Slope	1.00 1.00	Very limited Slope Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 1.00 0.05
319B: McMillan-----	45	Not limited		Somewhat limited Droughty	0.16
Noseum-----	40	Not limited		Somewhat limited Depth to saturated zone	0.19
319C: McMillan-----	45	Not limited		Somewhat limited Slope Droughty	0.63 0.16
Islandlake-----	40	Not limited		Somewhat limited Slope Droughty	0.63 0.13
319D: McMillan-----	45	Very limited Slope	1.00	Very limited Slope Droughty	1.00 0.16
Islandlake-----	40	Very limited Slope	1.00	Very limited Slope Droughty	1.00 0.13

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
319E: McMillan-----	45	Very limited Slope	1.00	Very limited Slope Droughty	1.00 0.16
Islandlake-----	40	Very limited Slope	1.00	Very limited Slope Droughty	1.00 0.13
322B: Stutts-----	60	Not limited		Somewhat limited Droughty	0.24
Keweenaw-----	30	Not limited		Somewhat limited Droughty Content of large stones	0.81 0.01
322C: Stutts-----	60	Not limited		Somewhat limited Slope Droughty	0.63 0.24
Keweenaw-----	30	Not limited		Somewhat limited Droughty Slope Content of large stones	0.81 0.63 0.01
322D: Stutts-----	60	Very limited Slope	1.00	Very limited Slope Droughty	1.00 0.24
Keweenaw-----	30	Very limited Slope	1.00	Very limited Slope Droughty Content of large stones	1.00 0.81 0.01
323B: Keweenaw-----	50	Very limited Gravel content	1.00	Very limited Gravel content Droughty	1.00 0.81
Kalkaska-----	40	Not limited		Somewhat limited Droughty	0.28
323C: Keweenaw-----	50	Very limited Gravel content	1.00	Very limited Gravel content Droughty Slope	1.00 0.81 0.63
Kalkaska-----	40	Not limited		Somewhat limited Slope Droughty	0.63 0.28

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
323D:					
Keweenaw-----	50	Very limited		Very limited	
		Gravel content	1.00	Slope	1.00
		Slope	1.00	Gravel content	1.00
				Droughty	0.81
Kalkaska-----	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
				Droughty	0.28
325B:					
Siskiwit-----	55	Not limited		Somewhat limited	
				Depth to	
				saturated zone	0.19
Gogebic-----	45	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
				Depth to cemented	1.00
				pan	
				Droughty	0.05
325C:					
Siskiwit-----	55	Not limited		Somewhat limited	
				Depth to	
				saturated zone	0.19
Gogebic-----	45	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
				Depth to cemented	1.00
				pan	
				Droughty	0.05
				Slope	0.04
327:					
Foxpaw-----	60	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Ponding	1.00	Ponding	1.00
Sarwet-----	40	Somewhat limited		Somewhat limited	
		Depth to	0.44	Depth to	0.75
		saturated zone		saturated zone	
328B:					
Annalake-----	50	Somewhat limited		Somewhat limited	
		Depth to	0.44	Depth to	0.75
		saturated zone		saturated zone	
Karlin-----	36	Not limited		Not limited	
328C:					
Annalake-----	50	Somewhat limited		Somewhat limited	
		Depth to	0.44	Depth to	0.75
		saturated zone		saturated zone	
				Slope	0.63
Karlin-----	40	Not limited		Somewhat limited	
				Slope	0.63

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
328D: Karlin-----	50	Somewhat limited Slope	0.82	Very limited Slope	1.00
Zandi-----	45	Somewhat limited Slope	0.82	Very limited Slope	1.00
329A: Tula-----	90	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 0.64 0.01
351B: Gogebic-----	85	Very limited Depth to saturated zone Content of large stones	1.00 0.76	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 0.05
351C: Gogebic-----	85	Very limited Depth to saturated zone Content of large stones	1.00 0.76	Very limited Depth to saturated zone Depth to cemented pan Slope Droughty	1.00 1.00 0.63 0.05
351D: Gogebic-----	85	Very limited Depth to saturated zone Slope Content of large stones	1.00 1.00 0.76	Very limited Slope Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 1.00 0.05
351E: Schweitzer-----	85	Very limited Slope Content of large stones	1.00 0.76	Very limited Slope Depth to cemented pan Droughty Content of large stones	1.00 0.99 0.02 0.01
351F: Schweitzer-----	90	Very limited Slope Content of large stones	1.00 0.76	Very limited Slope Depth to cemented pan Droughty Content of large stones	1.00 0.99 0.02 0.01

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
353A: Tula-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 0.64 0.01
354B: Gogebic-----	90	Very limited Depth to saturated zone Content of large stones	1.00 0.76	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 0.05
354C: Gogebic-----	90	Very limited Depth to saturated zone Content of large stones	1.00 0.76	Very limited Depth to saturated zone Depth to cemented pan Slope Droughty	1.00 1.00 0.63 0.05
354D: Gogebic-----	85	Very limited Depth to saturated zone Slope Content of large stones	1.00 1.00 0.76	Very limited Slope Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 1.00 0.05
354E: Schweitzer-----	85	Very limited Slope Content of large stones	1.00 0.76	Very limited Slope Content of large stones Depth to cemented pan Droughty	1.00 1.00 0.99 0.01
354F: Schweitzer-----	90	Very limited Slope Content of large stones	1.00 0.76	Very limited Slope Content of large stones Depth to cemented pan Droughty	1.00 1.00 0.99 0.01
363C: Talus-----	50	Not rated		Not rated	
Arcadian-----	35	Very limited Gravel content	1.00	Very limited Gravel content Droughty Depth to bedrock Slope	1.00 1.00 1.00 0.63

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
363D:					
Talus-----	46	Not rated		Not rated	
Arcadian-----	35	Very limited		Very limited	
		Gravel content	1.00	Slope	1.00
		Slope	1.00	Gravel content	1.00
				Droughty	1.00
				Depth to bedrock	1.00
363E:					
Talus-----	50	Not rated		Not rated	
Arcadian-----	35	Very limited		Very limited	
		Gravel content	1.00	Slope	1.00
		Slope	1.00	Gravel content	1.00
				Droughty	1.00
				Depth to bedrock	1.00
363F:					
Talus-----	50	Not rated		Not rated	
Arcadian-----	35	Very limited		Very limited	
		Gravel content	1.00	Slope	1.00
		Slope	1.00	Gravel content	1.00
				Droughty	1.00
				Depth to bedrock	1.00
364F:					
Talus-----	91	Not rated		Not rated	
365F:					
Rock outcrop-----	90	Not rated		Not rated	
369C:					
Dishno-----	35	Somewhat limited		Somewhat limited	
		Content of large	0.76	Slope	0.63
		stones		Depth to	0.19
				saturated zone	
Gogebic-----	30	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Content of large	0.76	Depth to cemented	1.00
		stones		pan	
				Slope	0.63
				Droughty	0.05
Peshekee-----	15	Somewhat limited		Very limited	
		Content of large	0.19	Depth to bedrock	1.00
		stones		Content of large	1.00
				stones	
				Slope	0.63
				Droughty	0.39
Rock outcrop-----	15	Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
369D:					
Dishno-----	35	Very limited Slope Content of large stones	1.00 0.76	Very limited Slope Depth to saturated zone	1.00 0.19
Gogebic-----	30	Very limited Depth to saturated zone Slope Content of large stones	1.00 1.00 0.76	Very limited Slope Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 1.00 0.05
Peshekee-----	15	Very limited Slope Content of large stones	1.00 0.19	Very limited Depth to bedrock Slope Content of large stones Droughty	1.00 1.00 1.00 0.39
Rock outcrop-----	15	Not rated		Not rated	
369E:					
Michigamme-----	30	Very limited Slope Content of large stones	1.00 0.19	Very limited Slope Depth to bedrock	1.00 0.35
Schweitzer-----	25	Very limited Slope Content of large stones	1.00 0.76	Very limited Slope Content of large stones Depth to cemented pan Droughty	1.00 1.00 0.99 0.01
Peshekee-----	20	Very limited Slope Content of large stones	1.00 0.19	Very limited Depth to bedrock Slope Content of large stones Droughty	1.00 1.00 1.00 0.39
Rock outcrop-----	15	Not rated		Not rated	
369F:					
Michigamme-----	30	Very limited Slope Content of large stones	1.00 0.19	Very limited Slope Depth to bedrock	1.00 0.35
Schweitzer-----	25	Very limited Slope Content of large stones	1.00 0.76	Very limited Slope Content of large stones Depth to cemented pan Droughty	1.00 1.00 0.99 0.01

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
369F: Peshekee-----	20	Very limited Slope Content of large stones	1.00 0.19	Very limited Depth to bedrock Slope Content of large stones Droughty	1.00 1.00 1.00 0.39
Rock outcrop-----	15	Not rated		Not rated	
370E: Peshekee-----	55	Very limited Slope Content of large stones	1.00 0.19	Very limited Depth to bedrock Slope Content of large stones Droughty	1.00 1.00 1.00 0.39
Rock outcrop-----	40	Not rated		Not rated	
370F: Peshekee-----	55	Very limited Slope Content of large stones	1.00 0.19	Very limited Depth to bedrock Slope Content of large stones Droughty	1.00 1.00 1.00 0.39
Rock outcrop-----	40	Not rated		Not rated	
375: Dumps and Pits, mine-----	95	Not rated		Not rated	
380: Beseman-----	55	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Greenwood-----	40	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
382: Cathro-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Arnheim-----	44	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 0.40	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
388:					
Gay-----	50	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Tula-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 0.64 0.01
398B:					
Tula-----	50	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 0.64 0.01
Gay-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Wakefield-----	15	Very limited Depth to saturated zone	1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
418:					
Loxley-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Too acid Ponding	1.00 1.00 1.00
Beseman-----	41	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
419:					
Pleine-----	45	Very limited Depth to saturated zone Ponding Content of large stones	1.00 1.00 0.42	Very limited Depth to saturated zone Content of large stones Ponding	1.00 1.00 1.00
Cathro-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
419: Gay-----	25	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
424: Gay-----	85	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
425: Foxpaw-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Gay-----	40	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
428C: Gogebic-----	70	Very limited Depth to saturated zone Content of large stones	1.00 0.76	Very limited Depth to saturated zone Depth to cemented pan Slope Droughty	1.00 1.00 0.63 0.05
Michigamme-----	25	Somewhat limited Content of large stones	0.47	Somewhat limited Slope Depth to bedrock	0.63 0.46
428D: Gogebic-----	70	Very limited Depth to saturated zone Slope Content of large stones	1.00 1.00 0.76	Very limited Slope Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 1.00 0.05
Michigamme-----	25	Very limited Slope Content of large stones	1.00 0.47	Very limited Slope Depth to bedrock	1.00 0.46
429B: Gogebic-----	79	Very limited Depth to saturated zone Content of large stones	1.00 0.19	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 0.05

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
429B: Peshekee-----	15	Somewhat limited Content of large stones	0.19	Very limited Depth to bedrock Content of large stones Droughty	1.00 1.00 0.39
429C: Gogebic-----	79	Very limited Depth to saturated zone Content of large stones	1.00 0.76	Very limited Depth to saturated zone Depth to cemented pan Slope Droughty	1.00 1.00 0.63 0.05
Peshekee-----	15	Somewhat limited Content of large stones	0.19	Very limited Depth to bedrock Content of large stones Slope Droughty	1.00 1.00 0.63 0.39
429D: Gogebic-----	75	Very limited Depth to saturated zone Slope Content of large stones	1.00 1.00 0.76	Very limited Slope Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 1.00 0.05
Peshekee-----	15	Very limited Slope Content of large stones	1.00 0.19	Very limited Slope Depth to bedrock Content of large stones Droughty	1.00 1.00 1.00 0.39
429E: Schweitzer-----	60	Very limited Slope Content of large stones	1.00 0.76	Very limited Slope Content of large stones Depth to cemented pan Droughty	1.00 1.00 0.99 0.01
Peshekee-----	35	Very limited Slope Content of large stones	1.00 0.19	Very limited Depth to bedrock Slope Content of large stones Droughty	1.00 1.00 1.00 0.39
430B: Stutts-----	90	Not limited		Somewhat limited Droughty	0.24

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
430C: Stutts-----	90	Not limited		Somewhat limited Slope	0.63
				Droughty	0.24
430D: Stutts-----	90	Very limited Slope	1.00	Very limited Slope	1.00
				Droughty	0.24
430E: Stutts-----	90	Very limited Slope	1.00	Very limited Slope	1.00
				Droughty	0.24
432C: Gogebic-----	68	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Content of large stones	0.76	Depth to cemented pan	1.00
				Slope	0.63
				Droughty	0.05
Michigamme-----	15	Somewhat limited Content of large stones	0.76	Somewhat limited Slope	0.63
				Depth to bedrock	0.35
Rock outcrop-----	15	Not rated		Not rated	
432D: Gogebic-----	68	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Content of large stones	0.76	Slope	1.00
		Slope	0.68	Depth to cemented pan	1.00
				Droughty	0.05
Michigamme-----	15	Somewhat limited Content of large stones	0.76	Very limited Slope	1.00
		Slope	0.68	Depth to bedrock	0.35
Rock outcrop-----	15	Not rated		Not rated	
432E: Schweitzer-----	45	Very limited Slope	1.00	Very limited Slope	1.00
		Content of large stones	0.76	Content of large stones	1.00
				Depth to cemented pan	0.99
				Droughty	0.01
Michigamme-----	20	Very limited Slope	1.00	Very limited Slope	1.00
				Depth to bedrock	0.46
Rock outcrop-----	20	Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
432F: Schweitzer-----	45	Very limited Slope Content of large stones	1.00 0.76	Very limited Slope Content of large stones Depth to cemented pan Droughty	1.00 1.00 0.99 0.01
Michigamme-----	20	Very limited Slope	1.00	Very limited Slope Depth to bedrock	1.00 0.46
Rock outcrop-----	20	Not rated		Not rated	
433B: McMillan-----	85	Not limited		Somewhat limited Droughty	0.16
433C: McMillan-----	85	Not limited		Somewhat limited Slope Droughty	0.63 0.16
433D: McMillan-----	85	Very limited Slope	1.00	Very limited Slope Droughty	1.00 0.16
435C: Kalkaska-----	45	Not limited		Somewhat limited Droughty Slope	0.28 0.16
Waiska-----	40	Not limited		Very limited Droughty Slope	1.00 0.16
435D: Kalkaska-----	45	Somewhat limited Slope	0.68	Very limited Slope Droughty	1.00 0.28
Waiska-----	40	Somewhat limited Slope	0.68	Very limited Slope Droughty	1.00 1.00
435E: Kalkaska-----	45	Very limited Slope	1.00	Very limited Slope Droughty	1.00 0.28
Waiska-----	40	Very limited Slope	1.00	Very limited Slope Droughty	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
437B: Manitowish-----	65	Not limited		Somewhat limited Depth to saturated zone	0.19
Channing-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
448F: Rockland-----	75	Very limited Slope	1.00	Very limited Slope	1.00
Rock outcrop-----	25	Not rated		Not rated	
449C: Flintsteel-----	70	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone Slope	0.75 0.63
Minocqua-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
452F: Rockland-----	90	Very limited Slope	1.00	Very limited Slope	1.00
460B: Belding-----	55	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Manido-----	25	Not limited		Somewhat limited Depth to saturated zone	0.19
461B: Loggerhead-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Content of large stones	1.00 0.01
462C: Nonesuch-----	75	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to cemented pan Depth to saturated zone Depth to bedrock Slope Droughty	0.95 0.75 0.16 0.04 0.02
Rock outcrop-----	15	Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
509: Cathro-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Minocqua-----	40	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
511A: Gogebic-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 0.05
Tula-----	30	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 0.64 0.01
Chabeneau-----	15	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone Content of large stones	0.75 0.03
519B: Gogebic-----	50	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 0.05
Karlin-----	40	Not limited		Not limited	
519C: Gogebic-----	50	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Slope Droughty	1.00 1.00 0.63 0.05
Karlin-----	40	Not limited		Somewhat limited Slope	0.63

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
519D: Gogebic-----	50	Very limited Depth to saturated zone Slope	1.00 1.00	Very limited Slope Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 1.00 0.05
Karlin-----	40	Very limited Slope	1.00	Very limited Slope	1.00
522: Pits, sand and gravel-----	100	Not rated		Not rated	
523D: Gogebic, sandy substratum-----	53	Very limited Depth to saturated zone Slope	1.00 0.50	Very limited Depth to saturated zone Slope Depth to cemented pan Droughty	1.00 1.00 1.00 0.05
Karlin-----	40	Somewhat limited Slope	0.68	Very limited Slope	1.00
524C: Waika-----	45	Not limited		Very limited Droughty Slope	1.00 0.63
Amasa-----	40	Not limited		Somewhat limited Slope	0.63
524D: Waika-----	45	Very limited Slope	1.00	Very limited Slope Droughty	1.00 1.00
Amasa-----	40	Very limited Slope	1.00	Very limited Slope	1.00
524E: Waika-----	45	Very limited Slope	1.00	Very limited Slope Droughty	1.00 1.00
Amasa-----	40	Very limited Slope	1.00	Very limited Slope	1.00
527B: Wakefield-----	85	Very limited Depth to saturated zone Content of large stones	1.00 0.04	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
527C: Wakefield-----	85	Very limited		Very limited	
		Depth to	1.00	Depth to cemented	1.00
		saturated zone		pan	
		Content of large	0.04	Depth to	1.00
		stones		saturated zone	
				Slope	0.63
527D: Wakefield-----	85	Very limited		Very limited	
		Depth to	1.00	Depth to cemented	1.00
		saturated zone		pan	
		Slope	1.00	Slope	1.00
		Content of large	0.04	Depth to	1.00
		stones		saturated zone	
528B: Gogebic-----	48	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
				Depth to cemented	1.00
				pan	
				Droughty	0.05
Annalake-----	45	Somewhat limited		Somewhat limited	
		Depth to	0.44	Depth to	0.75
		saturated zone		saturated zone	
528C: Gogebic-----	48	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
				Depth to cemented	1.00
				pan	
				Slope	0.63
				Droughty	0.05
Annalake-----	45	Very limited		Somewhat limited	
		Water erosion	1.00	Depth to	0.75
		Depth to	0.44	saturated zone	
		saturated zone		Slope	0.63
528D: Gogebic-----	48	Very limited		Very limited	
		Depth to	1.00	Slope	1.00
		saturated zone		Depth to	1.00
		Slope	1.00	saturated zone	
				Depth to cemented	1.00
				pan	
				Droughty	0.05
Annalake-----	45	Very limited		Very limited	
		Water erosion	1.00	Slope	1.00
		Slope	1.00	Depth to	0.75
		Depth to	0.44	saturated zone	
		saturated zone			

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
551B: Gogebic-----	65	Very limited Depth to saturated zone Content of large stones	1.00 0.76	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 0.05
Dishno-----	30	Not limited		Somewhat limited Depth to saturated zone	0.19
566: Beach, rubbly-----	95	Not rated		Not rated	
576B: Flintsteel-----	45	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.75
Loggerhead-----	40	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone Content of large stones	0.75 0.01
576C: Flintsteel-----	45	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone Slope	0.75 0.16
Loggerhead-----	40	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone Slope Content of large stones	0.75 0.16 0.01
576D: Flintsteel-----	45	Very limited Slope Depth to saturated zone	1.00 0.44	Very limited Slope Depth to saturated zone	1.00 0.75
Loggerhead-----	40	Very limited Slope Depth to saturated zone	1.00 0.44	Very limited Slope Depth to saturated zone Content of large stones	1.00 0.75 0.01
577B: Loggerhead-----	35	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone Content of large stones	0.75 0.01

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
577B: Chabeneau-----	30	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone Content of large stones	0.75 0.03
Arcadian-----	25	Very limited Gravel content	1.00	Very limited Gravel content Droughty Depth to bedrock	1.00 1.00 1.00
577C: Loggerhead-----	35	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone Slope Content of large stones	0.75 0.16 0.01
Chabeneau-----	30	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone Content of large stones	0.75 0.03
Arcadian-----	25	Very limited Gravel content	1.00	Very limited Gravel content Droughty Depth to bedrock Slope	1.00 1.00 1.00 0.63
577D: Loggerhead-----	35	Somewhat limited Slope Depth to saturated zone	0.50 0.44	Very limited Slope Depth to saturated zone Content of large stones	1.00 0.75 0.01
Chabeneau-----	30	Somewhat limited Depth to saturated zone Slope	0.44 0.18	Very limited Slope Depth to saturated zone Content of large stones	1.00 0.75 0.03
Arcadian-----	25	Very limited Gravel content Slope	1.00 1.00	Very limited Slope Gravel content Droughty Depth to bedrock	1.00 1.00 1.00 1.00
578D: Arcadian-----	59	Very limited Gravel content Slope	1.00 0.50	Very limited Gravel content Droughty Depth to bedrock Slope	1.00 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
578D: Keweenaw-----	40	Very limited Gravel content Slope	1.00 0.50	Very limited Gravel content Slope Droughty	1.00 1.00 0.81
625B: Fence-----	95	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.75
625C: Fence-----	98	Very limited Water erosion Depth to saturated zone	1.00 0.44	Somewhat limited Depth to saturated zone Slope	0.75 0.63
626D: Sporley-----	85	Very limited Water erosion Slope	1.00 1.00	Very limited Slope	1.00
626E: Sporley-----	90	Very limited Slope Water erosion	1.00 1.00	Very limited Slope	1.00
648B: Annalake-----	93	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.75
648C: Annalake-----	93	Very limited Water erosion Depth to saturated zone	1.00 0.44	Somewhat limited Depth to saturated zone Slope	0.75 0.63
650: Leafriver-----	90	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Droughty Ponding	1.00 1.00 1.00
652B: Manido-----	52	Not limited		Somewhat limited Depth to saturated zone	0.19
Annalake-----	24	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.75
656B: Stutts-----	60	Not limited		Somewhat limited Droughty	0.24
Zandi-----	30	Not limited		Not limited	

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
656C:					
Stutts-----	60	Not limited		Somewhat limited Slope	0.63
				Droughty	0.24
Zandi-----	30	Not limited		Somewhat limited Slope	0.63
656D:					
Stutts-----	60	Very limited Slope	1.00	Very limited Slope	1.00
				Droughty	0.24
Zandi-----	30	Very limited Slope	1.00	Very limited Slope	1.00
680B:					
Tonkey-----	37	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Pleine-----	32	Very limited Depth to saturated zone Ponding Content of large stones	1.00 1.00 0.76	Very limited Depth to saturated zone Content of large stones Ponding	1.00 1.00 1.00
Annalake-----	20	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.75
681:					
Cathro-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Tonkey-----	37	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
683B:					
Amasa-----	45	Not limited		Not limited	
Oldman-----	40	Very limited Depth to saturated zone Content of large stones	1.00 0.76	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 0.95 0.74
683C:					
Amasa-----	45	Not limited		Somewhat limited Slope	0.63

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
683C: Oldman-----	40	Very limited Depth to saturated zone Content of large stones	1.00 0.76	Very limited Depth to saturated zone Depth to cemented pan Droughty Slope	1.00 0.95 0.74 0.63
683D: Amasa-----	45	Very limited Slope	1.00	Very limited Slope	1.00
Oldman-----	40	Very limited Depth to saturated zone Slope Content of large stones	1.00 0.82 0.76	Very limited Slope Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 0.95 0.74
684B: Amasa-----	70	Not limited		Not limited	
684C: Amasa-----	78	Not limited		Somewhat limited Slope	0.63
684D: Amasa-----	78	Very limited Slope	1.00	Very limited Slope	1.00
686B: Annalake-----	40	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.75
Robago-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
688: Cathro-----	60	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 0.40	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00
Leafriver-----	40	Very limited Depth to saturated zone Ponding Flooding	1.00 1.00 0.40	Very limited Flooding Depth to saturated zone Droughty Ponding	1.00 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
689B: Chabeneau-----	35	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone Content of large stones	0.75 0.03
Channing-----	30	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Gogebic-----	25	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 0.05
691B: Dishno-----	35	Not limited		Somewhat limited Depth to saturated zone	0.19
Tula-----	30	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 0.64 0.01
Rock outcrop-----	20	Not rated		Not rated	
691D: Dishno-----	35	Somewhat limited Slope	0.18	Very limited Slope Depth to saturated zone	1.00 0.19
Tula-----	30	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 0.64 0.01
Rock outcrop-----	20	Not rated		Not rated	
693B: Chabeneau-----	50	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone Content of large stones	0.75 0.03
Annalake-----	40	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.75

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
694D:					
Annalake-----	40	Very limited		Very limited	
		Water erosion	1.00	Slope	1.00
		Depth to saturated zone	0.44	Depth to saturated zone	0.75
		Slope	0.08		
Stutts-----	35	Somewhat limited		Very limited	
		Slope	0.08	Slope	1.00
				Droughty	0.24
Arnheim-----	25	Very limited		Very limited	
		Depth to saturated zone	1.00	Flooding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Flooding	0.40	Ponding	1.00
5170:					
Minocqua-----	50	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Content of large stones	0.50		
Pleine-----	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Content of large stones	1.00
		Content of large stones	0.50	Ponding	1.00
Cathro-----	15	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
5171B:					
Tula-----	60	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of large stones	0.50	Depth to cemented pan	0.64
				Droughty	0.03
Wormet-----	15	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Content of large stones	0.50		
Gogebic, sandy substratum-----	15	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
				Depth to cemented pan	1.00
				Droughty	0.05

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
5172B: Gogebic, sandy substratum-----	60	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 0.05
Pence-----	15	Somewhat limited Content of large stones	0.50	Somewhat limited Droughty	0.10
Cathro-----	15	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
5172C: Gogebic, sandy substratum-----	60	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Depth to cemented pan Slope Droughty	1.00 1.00 0.63 0.05
Pence-----	15	Somewhat limited Content of large stones	0.50	Somewhat limited Slope Droughty	0.63 0.10
Cathro-----	15	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
5172D: Gogebic, sandy substratum-----	60	Very limited Depth to saturated zone Slope	1.00 1.00	Very limited Slope Depth to saturated zone Depth to cemented pan Droughty	1.00 1.00 1.00 0.05
Pence-----	15	Very limited Slope Content of large stones	1.00 0.50	Very limited Slope Droughty	1.00 0.10
Cathro-----	15	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 10b.--Recreational Development--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value
5173D: Gogebic, sandy substratum-----	60	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00
				Depth to cemented pan	1.00
				Droughty	0.05
Pence-----	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Content of large stones	0.50	Droughty	0.10

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat

(See text for definitions of terms used in this table. Absence of an entry indicates that no rating is applicable)

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
7:										
Histosols-----	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Good	Good	Very poor.	Very poor.	Good.
Aquents-----	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Good	Good	Very poor.	Very poor.	Good.
10:										
Witbeck-----	Very poor.	Poor	Fair	Fair	Fair	Good	Fair	Poor	Fair	Fair.
12A:										
Monico-----	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair.
13B:										
Argonne-----	Very poor.	Poor	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
13C:										
Argonne-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
13D:										
Argonne-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
15B:										
Wabeno-----	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
15C:										
Wabeno-----	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
16A:										
Fence-----	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
17B:										
Lode-----	Fair	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
17C:										
Lode-----	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
20B:										
Pence-----	Poor	Fair	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
Lode-----	Fair	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
20C:										
Pence-----	Poor	Fair	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
21:										
Minocqua-----	Very poor.	Fair	Fair	Fair	Fair	Good	Good	Poor	Fair	Good.
Leafriver-----	Very poor.	Very poor.	Poor	Poor	Poor	Fair	Good	Poor	Poor	Fair.
23B:										
Chabeneau-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Karlin-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Pence-----	Fair	Fair	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
26B:										
Stambaugh-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
27:										
Lupton-----	Very poor.	Poor	Very poor.	Poor	Poor	Good	Good	Poor	Very poor.	Good.
Tawas-----	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
28:										
Dawson-----	Very poor.	Very poor.	Poor	Poor	Poor	Good	Good	Very poor.	Poor	Good.
Greenwood-----	Very poor.	Poor	Poor	Very poor.	Poor	Good	Good	Poor	Very poor.	Good.
Loxley-----	Very poor.	Very poor.	Very poor.	Poor	Poor	Good	Good	Poor	Poor	Very poor.
29B:										
Pence, very deep water table-----	Fair	Fair	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
31:										
Evart-----	Very poor.	Very poor.	Fair	Fair	Fair	Good	Good	Poor	Fair	Good.
Tawas-----	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
32A:										
Net-----	Poor	Fair	Good	Good	Good	Fair	Fair	Fair	Good	Fair.
35A:										
Beechwood-----	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair.
36:										
Gay-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
Pleine-----	Very poor.	Poor	Fair	Fair	Fair	Good	Good	Poor	Fair	Good.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
37B:										
Gogebic-----	Good	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
Tula-----	Fair	Good	Good	Good	Good	Fair	Poor	Good	Good	Poor.
Lupton-----	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
38B:										
Gogebic, sandy substratum-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
38C:										
Gogebic, sandy substratum-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
38D:										
Gogebic, sandy substratum-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
39B:										
Gogebic, sandy substratum-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
39C:										
Gogebic, sandy substratum-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
39D:										
Gogebic, sandy substratum-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
41:										
Lupton-----	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
Pleine-----	Very poor.	Poor	Fair	Fair	Fair	Good	Good	Poor	Fair	Good.
Cathro-----	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
42:										
Ausable-----	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
Tawas-----	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
43B:										
Karlin-----	Poor	Fair	Good	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
Pence-----	Fair	Fair	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
43C:										
Karlin-----	Poor	Fair	Good	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
Pence-----	Poor	Fair	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
43D:										
Karlin-----	Poor	Fair	Good	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
Pence-----	Very poor.	Fair	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
44B:										
Karlin-----	Poor	Fair	Good	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
Keweenaw-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Sarona, dense substratum-----	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
44C:										
Karlin-----	Poor	Fair	Good	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
Keweenaw-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Sarona, dense substratum-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
44D:										
Karlin-----	Poor	Fair	Good	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
Keweenaw-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Sarona, dense substratum-----	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
46C:										
Amasa-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Karlin-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
46D:										
Amasa-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Karlin-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
46E:										
Amasa-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Karlin-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
46F:										
Amasa-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Karlin-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
47B:										
Karlin, very deep water table-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Noseum-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Gay-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
48C:										
Karlin-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Michigamme-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
48F:										
Karlin-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Michigamme-----	Very poor.	Very poor.	Very poor.	Fair	Good	Very poor.	Very poor.	Very poor.	Fair	Very poor.
49B:										
Pelissier-----	Poor	Poor	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
Sarwet-----	Fair	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
49C:										
Pelissier-----	Poor	Poor	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
Sarwet-----	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
49D:										
Pelissier-----	Very poor.	Poor	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
52B:										
Pence-----	Fair	Fair	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
Vilas-----	Poor	Poor	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
52C:										
Pence-----	Fair	Fair	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
Vilas-----	Poor	Poor	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
53B:										
Manitowish-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Croswell-----	Poor	Poor	Good	Fair	Good	Poor	Very poor.	Fair	Fair	Very poor.
57B:										
Karlin-----	Poor	Fair	Good	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
Manitowish-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
57C:										
Karlin-----	Poor	Fair	Good	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
Manitowish-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
58B:										
Vilas, very deep water table-----	Poor	Poor	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
Croswell-----	Poor	Poor	Good	Fair	Good	Poor	Very poor.	Fair	Fair	Very poor.
Pence, very deep water table-----	Fair	Fair	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
61:										
Tawas-----	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
Kinross-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
62B:										
Pelkie-----	Poor	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
83:										
Bowstring-----	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
141D:										
Oldman-----	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
141E:										
Oldman-----	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
141F:										
Porkies-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
214B:										
Amnicon-----	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
Bergland-----	Poor	Poor	Fair	Fair	Fair	Good	Good	Poor	Fair	Good.
216B:										
Amnicon-----	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
217A:										
Cuttre-----	Fair	Fair	Fair	Good	Good	Fair	Fair	Fair	Good	Fair.
218:										
Bergland-----	Poor	Poor	Fair	Fair	Fair	Good	Good	Poor	Fair	Good.
219B:										
Payseor-----	Fair	Fair	Fair	Good	Good	Fair	Fair	Fair	Good	Fair.
Froberg-----	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
222:										
Matchwood-----	Very poor.	Poor	Poor	Fair	Poor	Good	Good	Poor	Fair	Good.
225A:										
Cuttre-----	Fair	Fair	Fair	Good	Good	Fair	Fair	Fair	Good	Fair.
Bergland-----	Poor	Poor	Fair	Fair	Fair	Good	Good	Poor	Fair	Good.
226B:										
Froberg-----	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
230B:										
Moquah-----	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
Arnheim-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
231:										
Matchwood-----	Very poor.	Poor	Poor	Fair	Poor	Good	Good	Poor	Fair	Good.
Dorval-----	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
233:										
Schaat Creek-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
239D:										
Miskoaki-----	Poor	Fair	Fair	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
277B:										
Kellogg, sandy substratum-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Allendale-----	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
280B: Flintsteel-----	Good	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
280C: Flintsteel-----	Good	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
282B: Big Iron-----	Good	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair.
Flintsteel-----	Good	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
283B: Loggerhead-----	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
Noseum-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Ubyl-----	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
283C: Loggerhead-----	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
Noseum-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Ubyl-----	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
284: Aquents-----	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	Good	Good	Very poor.	Very poor.	Good.
Gull Point-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
285F: Rockland-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Arnheim-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
286A: Big Iron-----	Good	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair.
Belding-----	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair.
287: Trap Falls-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
Tonkey-----	Very poor.	Poor	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
289B: Amasa-----	Fair	Fair	Good	Fair	Fair	Poor	Very poor.	Fair	Fair	Very poor.
290B: Flintsteel-----	Good	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
290C: Flintsteel-----	Good	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
291B: Kalkaska-----	Poor	Poor	Fair	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
291D: Kalkaska-----	Poor	Poor	Fair	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
292B: Manido-----	Poor	Poor	Good	Good	Good	Poor	Very poor.	Fair	Good	Very poor.
Richter-----	Fair	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
293A: Wainola-----	Fair	Fair	Good	Good	Good	Fair	Fair	Fair	Good	Fair.
Trap Falls-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
296B: Manido-----	Poor	Poor	Good	Good	Good	Poor	Very poor.	Fair	Good	Very poor.
Fence-----	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
Gogebic, sandy substratum-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
296D: Manido-----	Poor	Poor	Good	Good	Good	Poor	Very poor.	Fair	Good	Very poor.
Sporley-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Gogebic, sandy substratum-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
299B: Zandi-----	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
Amasa-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Flintsteel-----	Good	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
299C: Zandi-----	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
Amasa-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Flintsteel-----	Good	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
301A: Moodig-----	Fair	Fair	Good	Good	Good	Fair	Fair	Fair	Good	Fair.
302B: Manitowish-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
302C: Manitowish-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
303: Bowstring-----	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
Arnheim-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
305B: Keweenaw-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Siskiwit-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
305C: Keweenaw-----	Fair	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Siskiwit-----	Fair	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
307: Lupton-----	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
Cathro-----	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
309: Cathro-----	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
310B: Gogebic-----	Poor	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
310C: Gogebic-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
310D: Gogebic-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
310E: Schweitzer-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
311B: Tula-----	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair.
Gogebic-----	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
312A:										
Tula-----	Poor	Fair	Good	Good	Good	Fair	Poor	Fair	Good	Poor.
Foxpaw-----	Poor	Poor	Fair	Fair	Fair	Good	Good	Poor	Fair	Good.
Gay-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
316:										
Gay-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
317B:										
Gogebic-----	Poor	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
317C:										
Gogebic-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
317D:										
Gogebic-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
319B:										
McMillan-----	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
Noseum-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
319C:										
McMillan-----	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
Islandlake-----	Poor	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
319D:										
McMillan-----	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
Islandlake-----	Poor	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
319E:										
McMillan-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Islandlake-----	Poor	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
322B:										
Stutts-----	Fair	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Keweenaw-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
322C:										
Stutts-----	Fair	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Keweenaw-----	Fair	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
322D:										
Stutts-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Keweenaw-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
323B:										
Keweenaw-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Kalkaska-----	Poor	Poor	Fair	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
323C:										
Keweenaw-----	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
Kalkaska-----	Poor	Poor	Fair	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
323D:										
Keweenaw-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Kalkaska-----	Poor	Poor	Fair	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
325B:										
Siskiwit-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Gogebic-----	Poor	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
325C:										
Siskiwit-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Gogebic-----	Poor	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
327:										
Foxpaw-----	Poor	Poor	Fair	Fair	Fair	Good	Good	Poor	Fair	Good.
Sarwet-----	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
328B:										
Annalake-----	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
Karlin-----	Fair	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
328C:										
Annalake-----	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
Karlin-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
328D:										
Karlin-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Zandi-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
329A: Tula-----	Fair	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
351B: Gogebic-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
351C: Gogebic-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
351D: Gogebic-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Fair	Very poor.
351E: Schweitzer-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
351F: Schweitzer-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
353A: Tula-----	Poor	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
354B: Gogebic-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
354C: Gogebic-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
354D: Gogebic-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Fair	Very poor.
354E: Schweitzer-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
354F: Schweitzer-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
363C: Talus.										
Arcadian-----	Very poor.	Poor	Very poor.	Very poor.	Poor	Very poor.	Very poor.	Poor	Very poor.	Very poor.
363D: Talus.										
Arcadian-----	Very poor.	Very poor.	Very poor.	Very poor.	Poor	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
363E: Talus.										
Arcadian-----	Very poor.	Very poor.	Very poor.	Very poor.	Poor	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.
363F: Talus.										
Arcadian-----	Very poor.	Very poor.	Very poor.	Very poor.	Poor	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.
364F. Talus										
365F. Rock outcrop										
369C: Dishno-----	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Gogebic-----	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Peshekee-----	Very poor.	Poor	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
Rock outcrop.										
369D: Dishno-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Gogebic-----	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Peshekee-----	Very poor.	Poor	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
Rock outcrop.										
369E: Michigamme-----	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Schweitzer-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
Peshekee-----	Very poor.	Poor	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
Rock outcrop.										
369F: Michigamme-----	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
369F:										
Schweitzer-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
Peshekee-----	Very poor.	Poor	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
Rock outcrop.										
370E:										
Peshekee-----	Very poor.	Poor	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
Rock outcrop.										
370F:										
Peshekee-----	Very poor.	Poor	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
Rock outcrop.										
375.										
Dumps and Pits, mine										
380:										
Beseman-----	Very poor.	Very poor.	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
Greenwood-----	Very poor.	Poor	Poor	Very poor.	Poor	Good	Good	Poor	Very poor.	Good.
382:										
Cathro-----	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
Arnheim-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
388:										
Gay-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
Tula-----	Poor	Fair	Good	Good	Good	Fair	Fair	Fair	Good	Fair.
398B:										
Tula-----	Poor	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Gay-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
Wakefield-----	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
418:										
Loxley-----	Very poor.	Poor	Poor	Very poor.	Poor	Good	Good	Poor	Very poor.	Good.
Beseman-----	Very poor.	Very poor.	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
419:										
Pleine-----	Very poor.	Poor	Fair	Fair	Fair	Good	Good	Poor	Fair	Good.
Cathro-----	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
Gay-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
424:										
Gay-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
425:										
Foxpaw-----	Poor	Poor	Fair	Fair	Fair	Good	Good	Poor	Fair	Good.
Gay-----	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
428C:										
Gogebic-----	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Michigamme-----	Very poor.	Very poor.	Very poor.	Fair	Good	Very poor.	Very poor.	Very poor.	Fair	Very poor.
428D:										
Gogebic-----	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Michigamme-----	Very poor.	Very poor.	Very poor.	Fair	Good	Very poor.	Very poor.	Very poor.	Fair	Very poor.
429B:										
Gogebic-----	Very poor.	Poor	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Peshekee-----	Very poor.	Poor	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
429C:										
Gogebic-----	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Peshekee-----	Very poor.	Poor	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
429D:										
Gogebic-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Fair	Very poor.
Peshekee-----	Very poor.	Poor	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
429E:										
Schweitzer-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
Peshekee-----	Very poor.	Poor	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
430B: Stutts-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
430C: Stutts-----	Fair	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
430D: Stutts-----	Very poor.	Very poor.	Fair	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
430E: Stutts-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
432C: Gogebic-----	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Michigamme-----	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
Rock outcrop.										
432D: Gogebic-----	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Michigamme-----	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Rock outcrop.										
432E: Schweitzer-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
Michigamme-----	Very poor.	Very poor.	Very poor.	Fair	Good	Very poor.	Very poor.	Very poor.	Fair	Very poor.
Rock outcrop.										
432F: Schweitzer-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
Michigamme-----	Very poor.	Very poor.	Very poor.	Fair	Good	Very poor.	Very poor.	Very poor.	Fair	Very poor.
Rock outcrop.										
433B: McMillan-----	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
433C: McMillan-----	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
433D: McMillan-----	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
435C:										
Kalkaska-----	Poor	Poor	Fair	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
Waiska-----	Poor	Poor	Fair	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
435D:										
Kalkaska-----	Poor	Poor	Fair	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
Waiska-----	Poor	Poor	Fair	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
435E:										
Kalkaska-----	Poor	Poor	Fair	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
Waiska-----	Poor	Poor	Fair	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
437B:										
Manitowish-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Channing-----	Very poor.	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair.
448F:										
Rockland-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Rock outcrop.										
449C:										
Flintsteel-----	Good	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
Minocqua-----	Very poor.	Fair	Fair	Fair	Fair	Good	Good	Poor	Fair	Good.
452F:										
Rockland-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
460B:										
Belding-----	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair.
Manido-----	Poor	Poor	Good	Good	Good	Poor	Very poor.	Fair	Good	Very poor.
461B:										
Loggerhead-----	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
462C:										
Nonesuch-----	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Rock outcrop.										

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
509:										
Cathro-----	Very poor.	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
Minocqua-----	Very poor.	Fair	Fair	Fair	Fair	Good	Good	Poor	Fair	Good.
511A:										
Gogebic-----	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
Tula-----	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair.
Chabeneau-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
519B:										
Gogebic-----	Poor	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Karlin-----	Fair	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
519C:										
Gogebic-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Karlin-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
519D:										
Gogebic-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Karlin-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
522.										
Pits, sand and gravel										
523D:										
Gogebic, sandy substratum-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Karlin-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
524C:										
Waiska-----	Poor	Poor	Fair	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
Amasa-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
524D:										
Waiska-----	Poor	Poor	Fair	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
Amasa-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
524E: Waiska-----	Poor	Poor	Fair	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.
Amasa-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
527B: Wakefield-----	Very poor.	Poor	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
527C: Wakefield-----	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Poor.
527D: Wakefield-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
528B: Gogebic-----	Poor	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Annalake-----	Poor	Poor	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
528C: Gogebic-----	Poor	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Annalake-----	Poor	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
528D: Gogebic-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Annalake-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
551B: Gogebic-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Dishno-----	Very poor.	Poor	Good	Good	Good	Poor	Poor	Poor	Good	Poor.
566. Beach, rubbly										
576B: Flintsteel-----	Good	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
Loggerhead-----	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
576C: Flintsteel-----	Good	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
Loggerhead-----	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
576D:										
Flintsteel-----	Good	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
Loggerhead-----	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
577B:										
Loggerhead-----	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
Chabeneau-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Arcadian-----	Very poor.	Poor	Very poor.	Very poor.	Poor	Poor	Poor	Poor	Very poor.	Poor.
577C:										
Loggerhead-----	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
Chabeneau-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Arcadian-----	Very poor.	Poor	Very poor.	Very poor.	Poor	Very poor.	Very poor.	Poor	Very poor.	Very poor.
577D:										
Loggerhead-----	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
Chabeneau-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Arcadian-----	Very poor.	Very poor.	Very poor.	Very poor.	Poor	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.
578D:										
Arcadian-----	Very poor.	Very poor.	Very poor.	Very poor.	Poor	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.
Keweenaw-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
625B:										
Fence-----	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
625C:										
Fence-----	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
626D:										
Sporley-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
626E:										
Sporley-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
648B:										
Annalake-----	Poor	Poor	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
648C:										
Annalake-----	Poor	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
650: Leafriver-----	Very poor.	Very poor.	Poor	Poor	Poor	Fair	Good	Poor	Poor	Fair.
652B: Manido-----	Poor	Poor	Good	Good	Good	Poor	Very poor.	Fair	Good	Very poor.
Annalake-----	Poor	Poor	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
656B: Stutts-----	Fair	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Zandi-----	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
656C: Stutts-----	Fair	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Zandi-----	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
656D: Stutts-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Zandi-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
680B: Tonkey-----	Very poor.	Poor	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
Pleine-----	Very poor.	Poor	Fair	Fair	Fair	Good	Good	Poor	Fair	Good.
Annalake-----	Poor	Poor	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
681: Cathro-----	Very poor.	Poor	Very poor.	Poor	Poor	Good	Good	Poor	Very poor.	Good.
Tonkey-----	Very poor.	Poor	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
683B: Amasa-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Oldman-----	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
683C: Amasa-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Oldman-----	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
683D:										
Amasa-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Oldman-----	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
684B:										
Amasa-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
684C:										
Amasa-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
684D:										
Amasa-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
686B:										
Annalake-----	Poor	Poor	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Robago-----	Poor	Fair	Good	Fair	Fair	Fair	Fair	Fair	Fair	Fair.
688:										
Cathro-----	Very poor.	Poor	Very poor.	Poor	Poor	Good	Good	Poor	Very poor.	Good.
Leafriver-----	Very poor.	Very poor.	Poor	Poor	Poor	Fair	Good	Poor	Poor	Fair.
689B:										
Chabeneau-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Channing-----	Very poor.	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair.
Gogebic-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
691B:										
Dishno-----	Very poor.	Poor	Good	Good	Good	Poor	Poor	Poor	Good	Poor.
Tula-----	Poor	Fair	Good	Good	Good	Fair	Poor	Fair	Good	Poor.
Rock outcrop.										
691D:										
Dishno-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Tula-----	Poor	Fair	Good	Good	Good	Fair	Poor	Fair	Good	Poor.
Rock outcrop.										
693B:										
Chabeneau-----	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor.
Annalake-----	Poor	Poor	Good	Good	Good	Poor	Poor	Fair	Good	Poor.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
694D:										
Annalake-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Stutts-----	Very poor.	Very poor.	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Arnheim-----	Poor	Poor	Fair	Fair	Fair	Good	Good	Poor	Fair	Good.
5170:										
Minocqua-----	Very poor.	Fair	Fair	Fair	Fair	Good	Good	Poor	Fair	Good.
Pleine-----	Very poor.	Poor	Fair	Fair	Fair	Good	Good	Poor	Fair	Good.
Cathro-----	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
5171B:										
Tula-----	Very poor.	Poor	Good	Fair	Fair	Poor	Poor	Poor	Fair	Poor.
Wormet-----	Very poor.	Poor	Good	Fair	Fair	Fair	Fair	Good	Good	Fair.
Gogebic, sandy substratum-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
5172B:										
Gogebic, sandy substratum-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Pence-----	Fair	Fair	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
Cathro-----	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
5172C:										
Gogebic, sandy substratum-----	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Pence-----	Fair	Fair	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Poor	Very poor.
Cathro-----	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
5172D:										
Gogebic, sandy substratum-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Pence-----	Very poor.	Poor	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
Cathro-----	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.

Soil Survey of Gogebic County, Michigan

Table 11.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hardwood trees	Conif- erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
5173D: Gogebic, sandy substratum-----	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Pence-----	Very poor.	Poor	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7:							
Histosols-----	60	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
Aquents-----	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
10:							
Witbeck-----	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
12A:							
Monico-----	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
13B:							
Argonne-----	83	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
				Depth to thin cemented pan	0.01		
13C:							
Argonne-----	83	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	0.63	Slope	0.63	Slope	1.00
				Depth to thin cemented pan	0.01		
13D:							
Argonne-----	86	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
				Depth to thin cemented pan	0.01		
15B:							
Wabeno-----	100	Somewhat limited		Very limited		Somewhat limited	
		Depth to thin cemented pan	0.50	Depth to saturated zone	1.00	Depth to thin cemented pan	1.00
		Depth to saturated zone	0.07	Depth to thin cemented pan	1.00	Depth to saturated zone	0.07

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
15C: Wabeno-----	100	Somewhat limited Slope	0.63	Very limited Depth to	1.00	Very limited Depth to thin	1.00
		Depth to thin cemented pan	0.50	saturated zone		cemented pan	
		Depth to	0.07	Depth to thin	1.00	Slope	1.00
		saturated zone		cemented pan		Depth to	0.07
				Slope	0.63	saturated zone	
16A: Fence-----	100	Somewhat limited Depth to	0.98	Very limited Depth to	1.00	Somewhat limited Depth to	0.98
		saturated zone		saturated zone		saturated zone	
17B: Lode-----	85	Not limited		Not limited		Not limited	
17C: Lode-----	86	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
20B: Pence-----	62	Not limited		Not limited		Not limited	
Lode-----	30	Not limited		Not limited		Not limited	
20C: Pence-----	86	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
21: Minocqua-----	60	Very limited Depth to	1.00	Very limited Depth to	1.00	Very limited Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Leafriver-----	30	Very limited Depth to	1.00	Very limited Depth to	1.00	Very limited Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
23B: Chabeneau-----	57	Somewhat limited Depth to	0.98	Very limited Depth to	1.00	Somewhat limited Depth to	0.98
		saturated zone		saturated zone		saturated zone	
Karlin-----	28	Not limited		Not limited		Not limited	
Pence-----	15	Not limited		Not limited		Not limited	
26B: Stambaugh-----	90	Not limited		Not limited		Not limited	
27: Lupton-----	50	Very limited Subsidence	1.00	Very limited Subsidence	1.00	Very limited Subsidence	1.00
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Organic matter	1.00	Organic matter	1.00	Organic matter	1.00
		content		content		content	
		Ponding	1.00	Ponding	1.00	Ponding	1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
27: Tawas-----	48	Very limited Subsidence Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Ponding	1.00 1.00 1.00
28: Dawson-----	40	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00
Greenwood-----	35	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00
Loxley-----	20	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00
29B: Pence, very deep water table-----	85	Not limited		Not limited		Not limited	
31: Evart-----	55	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00
Tawas-----	45	Very limited Subsidence Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Ponding	1.00 1.00 1.00
32A: Net-----	100	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00
35A: Beechwood-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
36:							
Gay-----	58	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Pleine-----	30	Very limited Depth to saturated zone Ponding Content of large stones	1.00 1.00 0.01	Very limited Depth to saturated zone Ponding Content of large stones	1.00 1.00 0.01	Very limited Depth to saturated zone Ponding Content of large stones	1.00 1.00 0.01
37B:							
Gogebic-----	51	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00
Tula-----	31	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 0.65	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 0.65
Lupton-----	15	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00
38B:							
Gogebic, sandy substratum-----	95	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00
38C:							
Gogebic, sandy substratum-----	95	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope Depth to thick cemented pan	1.00 1.00 1.00
38D:							
Gogebic, sandy substratum-----	95	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
39B: Gogebic, sandy substratum-----	85	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00
39C: Gogebic, sandy substratum-----	85	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope Depth to thick cemented pan	1.00 1.00 1.00
39D: Gogebic, sandy substratum-----	85	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00
41: Lupton-----	60	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00
Pleine-----	23	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Cathro-----	15	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00
42: Ausable-----	70	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
Tawas-----	25	Very limited Subsidence Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Ponding	1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
43B:							
Karlin-----	55	Not limited		Not limited		Not limited	
Pence-----	40	Not limited		Not limited		Not limited	
43C:							
Karlin-----	55	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Pence-----	40	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
43D:							
Karlin-----	55	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Pence-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
44B:							
Karlin-----	36	Not limited		Not limited		Somewhat limited Slope	0.12
Keweenaw-----	30	Not limited		Not limited		Not limited	
Sarona, dense substratum-----	25	Not limited		Not limited		Somewhat limited Slope	0.12
44C:							
Karlin-----	36	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Keweenaw-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Sarona, dense substratum-----	25	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
44D:							
Karlin-----	36	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Keweenaw-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Sarona, dense substratum-----	25	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
46C:							
Amasa-----	54	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
Karlin-----	40	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
46D:							
Amasa-----	52	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Karlin-----	38	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
46E:							
Amasa-----	52	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Karlin-----	38	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
46F:							
Amasa-----	53	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Karlin-----	37	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
47B:							
Karlin, very deep water table-----	41	Not limited		Not limited		Not limited	
Noseum-----	35	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
Gay-----	16	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
48C:							
Karlin-----	75	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Michigamme-----	20	Somewhat limited Depth to hard bedrock Slope	0.35 0.16	Very limited Depth to hard bedrock Slope	1.00 0.16	Very limited Slope Depth to hard bedrock	1.00 0.35
48F:							
Karlin-----	55	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Michigamme-----	30	Very limited Slope Depth to hard bedrock	1.00 0.46	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 0.46
49B:							
Pelissier-----	52	Not limited		Not limited		Not limited	
Sarwet-----	35	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.98

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
49C: Pelissier-----	50	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Sarwet-----	35	Very limited Slope Depth to saturated zone	1.00 0.98	Very limited Depth to saturated zone Slope	1.00 1.00	Very limited Slope Depth to saturated zone	1.00 0.98
49D: Pelissier-----	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
52B: Pence-----	56	Not limited		Not limited		Not limited	
Vilas-----	35	Not limited		Not limited		Not limited	
52C: Pence-----	56	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Vilas-----	35	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
53B: Manitowish-----	77	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
Croswell-----	22	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
57B: Karlin-----	70	Not limited		Not limited		Not limited	
Manitowish-----	20	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
57C: Karlin-----	75	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Manitowish-----	16	Somewhat limited Slope Depth to saturated zone	0.63 0.39	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Slope Depth to saturated zone	1.00 0.39
58B: Vilas, very deep water table-----	40	Not limited		Not limited		Not limited	
Croswell-----	22	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
Pence, very deep water table-----	20	Not limited		Not limited		Not limited	

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
61: Tawas-----	60	Very limited Subsidence Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Ponding	1.00 1.00 1.00
Kinross-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
62B: Pelkie-----	100	Very limited Flooding	1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding	1.00
83: Bowstring-----	90	Very limited Flooding Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00
141D: Oldman-----	80	Very limited Depth to saturated zone Content of large stones Depth to thick cemented pan Slope	1.00 0.96 0.95 0.63	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.96 0.63	Very limited Slope Depth to saturated zone Content of large stones Depth to thick cemented pan	1.00 1.00 0.96 0.95
141E: Oldman-----	80	Very limited Slope Depth to saturated zone Content of large stones Depth to thick cemented pan	1.00 1.00 0.96 0.95	Very limited Slope Depth to saturated zone Depth to thick cemented pan stones	1.00 1.00 1.00 0.96	Very limited Slope Depth to saturated zone Content of large stones Depth to thick cemented pan	1.00 1.00 0.96 0.95
141F: Porkies-----	80	Very limited Slope Content of large stones	1.00 0.13	Very limited Slope Content of large stones	1.00 0.13	Very limited Slope Content of large stones	1.00 0.13
214B: Amnicon-----	60	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Slope	1.00 1.00 0.12

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
214B: Bergland-----	30	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
216B: Amnicon-----	85	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell Slope	1.00 1.00 0.12
217A: Cuttre-----	85	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00
218: Bergland-----	80	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
219B: Payseor-----	50	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Froberg-----	40	Very limited Shrink-swell Depth to saturated zone	1.00 0.98	Very limited Depth to saturated zone	1.00	Very limited Shrink-swell Depth to saturated zone	1.00 0.98
222: Matchwood-----	85	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Shrink-swell	1.00 1.00 0.44	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
225A: Cuttre-----	50	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00	Very limited Depth to saturated zone Shrink-swell	1.00 1.00
Bergland-----	40	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
226B: Froberg-----	85	Very limited Shrink-swell Depth to saturated zone	1.00 0.98	Very limited Depth to saturated zone	1.00	Very limited Shrink-swell Depth to saturated zone	1.00 0.98
230B: Moquah-----	55	Very limited Flooding	1.00	Very limited Flooding Depth to saturated zone	1.00 0.82	Very limited Flooding	1.00
Arnheim-----	30	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00
231: Matchwood-----	45	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Shrink-swell	1.00 1.00 0.44	Very limited Depth to saturated zone Shrink-swell Ponding	1.00 1.00 1.00
Dorval-----	35	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00
233: Schaat Creek-----	90	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.22	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.22	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.22
239D: Miskoaki-----	85	Very limited Slope Shrink-swell	1.00 1.00	Very limited Slope Shrink-swell	1.00 1.00	Very limited Slope Shrink-swell	1.00 1.00
277B: Kellogg, sandy substratum-----	50	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.98
Allendale-----	35	Very limited Depth to saturated zone Shrink-swell	1.00 0.78	Very limited Depth to saturated zone Shrink-swell	1.00 0.78	Very limited Depth to saturated zone Shrink-swell	1.00 0.78
280B: Flintsteel-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
280C: Flintsteel-----	85	Very limited Depth to saturated zone Slope	1.00 0.16	Very limited Depth to saturated zone Slope	1.00 0.16	Very limited Slope Depth to saturated zone	1.00 1.00
282B: Big Iron-----	70	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Flintsteel-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
283B: Loggerhead-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Noseum-----	30	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
Ubly-----	20	Not limited		Not limited		Somewhat limited Slope	0.50
283C: Loggerhead-----	40	Very limited Depth to saturated zone Slope	1.00 0.16	Very limited Depth to saturated zone Slope	1.00 0.16	Very limited Depth to saturated zone Slope	1.00 1.00
Noseum-----	30	Somewhat limited Depth to saturated zone Slope	0.39 0.01	Very limited Depth to saturated zone Slope	1.00 0.01	Very limited Slope Depth to saturated zone	1.00 0.39
Ubly-----	20	Somewhat limited Slope	0.01	Somewhat limited Slope	0.01	Very limited Slope	1.00
284: Aquents-----	55	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Gull Point-----	40	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.44	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.44	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.44
285F: Rockland-----	70	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
285F: Arnheim-----	15	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00
286A: Big Iron-----	65	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Belding-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
287: Trap Falls-----	55	Very limited Depth to saturated zone Ponding Shrink-swell	1.00 1.00 0.22	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Shrink-swell	1.00 1.00 0.22
Tonkey-----	35	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
289B: Amasa-----	95	Not limited		Not limited		Not limited	
290B: Flintsteel-----	80	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
290C: Flintsteel-----	85	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Depth to saturated zone Slope	1.00 1.00
291B: Kalkaska-----	80	Not limited		Not limited		Not limited	
291D: Kalkaska-----	85	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
292B: Manido-----	45	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
Richter-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
293A: Wainola-----	55	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Trap Falls-----	25	Very limited Depth to saturated zone Ponding Shrink-swell	1.00 1.00 0.22	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Shrink-swell	1.00 1.00 0.22
296B: Manido-----	35	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
Fence-----	30	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.98
Gogebic, sandy substratum-----	20	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00
296D: Manido-----	35	Very limited Slope Depth to saturated zone	1.00 0.39	Very limited Slope Depth to saturated zone	1.00 1.00	Very limited Slope Depth to saturated zone	1.00 0.39
Sporley-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Gogebic, sandy substratum-----	20	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00
299B: Zandi-----	40	Not limited		Not limited		Not limited	
Amasa-----	30	Not limited		Not limited		Not limited	
Flintsteel-----	20	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.98
299C: Zandi-----	40	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Amasa-----	30	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
299C: Flintsteel-----	20	Somewhat limited Depth to saturated zone Slope	0.98 0.63	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Slope Depth to saturated zone	1.00 0.98
301A: Moodig-----	86	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
302B: Manitowish-----	85	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
302C: Manitowish-----	85	Somewhat limited Slope Depth to saturated zone	0.63 0.39	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Slope Depth to saturated zone	1.00 0.39
303: Bowstring-----	50	Very limited Flooding Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00
Arnheim-----	40	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00
305B: Keweenaw-----	45	Not limited		Not limited		Not limited	
Siskiwit-----	40	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone Slope	0.39 0.12
305C: Keweenaw-----	45	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
Siskiwit-----	40	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Slope Depth to saturated zone	0.50 0.39

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
307: Lupton-----	45	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00 1.00
Cathro-----	45	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00 1.00
309: Cathro-----	85	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00 1.00
310B: Gogebic-----	92	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00
310C: Gogebic-----	92	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 1.00 0.63	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 1.00 0.63	Very limited Depth to saturated zone Slope Depth to thick cemented pan	1.00 1.00 1.00 1.00
310D: Gogebic-----	92	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00 1.00
310E: Schweitzer-----	90	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 0.99 0.32	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 1.00 0.32	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 0.99 0.32

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
311B: Tula-----	45	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 0.65	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 0.65
Gogebic-----	40	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00
312A: Tula-----	35	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 0.65	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 0.65
Foxpaw-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Gay-----	25	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
316: Gay-----	85	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
317B: Gogebic-----	95	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00
317C: Gogebic-----	90	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope Depth to thick cemented pan	1.00 1.00 1.00
317D: Gogebic-----	88	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
319B: McMillan-----	45	Not limited		Not limited		Not limited	
Noseum-----	40	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
319C: McMillan-----	45	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Islandlake-----	40	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
319D: McMillan-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Islandlake-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
319E: McMillan-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Islandlake-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
322B: Stutts-----	60	Not limited		Not limited		Not limited	
Keweenaw-----	30	Not limited		Not limited		Not limited	
322C: Stutts-----	60	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Keweenaw-----	30	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
322D: Stutts-----	60	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Keweenaw-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
323B: Keweenaw-----	50	Not limited		Not limited		Not limited	
Kalkaska-----	40	Not limited		Not limited		Not limited	
323C: Keweenaw-----	50	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Kalkaska-----	40	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
323D: Keweenaw-----	50	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Kalkaska-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
325B: Siskiwit-----	55	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone Slope	0.39 0.12
Gogebic-----	45	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00
325C: Siskiwit-----	55	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Slope Depth to saturated zone	0.50 0.39
Gogebic-----	45	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.04	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.04	Very limited Depth to saturated zone Slope Depth to thick cemented pan	1.00 1.00 1.00
327: Foxpaw-----	60	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Sarwet-----	40	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.98
328B: Annalake-----	50	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.98
Karlin-----	36	Not limited		Not limited		Not limited	
328C: Annalake-----	50	Somewhat limited Depth to saturated zone Slope	0.98 0.63	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Slope Depth to saturated zone	1.00 0.98
Karlin-----	40	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
328D: Karlin-----	50	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Zandi-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
329A: Tula-----	90	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 0.65	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 0.65
351B: Gogebic-----	85	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00
351C: Gogebic-----	85	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope Depth to thick cemented pan	1.00 1.00 1.00
351D: Gogebic-----	85	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00
351E: Schweitzer-----	85	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 0.99 0.22	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 1.00 0.22	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 0.99 0.22
351F: Schweitzer-----	90	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 0.99 0.22	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 1.00 0.22	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 0.99 0.22
353A: Tula-----	85	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 0.65	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 0.65

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
354B: Gogebic-----	90	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00
354C: Gogebic-----	90	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope Depth to thick cemented pan	1.00 1.00 1.00
354D: Gogebic-----	85	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00
354E: Schweitzer-----	85	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 0.99 0.32	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 1.00 0.32	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 0.99 0.32
354F: Schweitzer-----	90	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 0.99 0.32	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 1.00 0.32	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 0.99 0.32
363C: Talus-----	50	Not rated		Not rated		Not rated	
Arcadian-----	35	Very limited Depth to hard bedrock Slope	1.00 0.63	Very limited Depth to hard bedrock Slope	1.00 0.63	Very limited Depth to hard bedrock Slope	1.00 1.00
363D: Talus-----	46	Not rated		Not rated		Not rated	
Arcadian-----	35	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
363E: Talus-----	50	Not rated		Not rated		Not rated	
Arcadian-----	35	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
363F: Talus-----	50	Not rated		Not rated		Not rated	
Arcadian-----	35	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
364F: Talus-----	91	Not rated		Not rated		Not rated	
365F: Rock outcrop-----	90	Not rated		Not rated		Not rated	
369C: Dishno-----	35	Somewhat limited Slope Depth to saturated zone Content of large stones	0.63 0.39 0.08	Very limited Depth to saturated zone Depth to hard bedrock Slope Content of large stones	1.00 0.77 0.63 0.08	Very limited Slope Depth to saturated zone Content of large stones	1.00 0.39 0.08
Gogebic-----	30	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope Depth to thick cemented pan	1.00 1.00 1.00
Peshekee-----	15	Very limited Depth to hard bedrock Slope Content of large stones	1.00 0.63 0.02	Very limited Depth to hard bedrock Slope Content of large stones	1.00 0.63 0.02	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.02
Rock outcrop-----	15	Not rated		Not rated		Not rated	
369D: Dishno-----	35	Very limited Slope Depth to saturated zone Content of large stones	1.00 0.39 0.08	Very limited Slope Depth to saturated zone Depth to hard bedrock Content of large stones	1.00 1.00 0.77 0.08	Very limited Slope Depth to saturated zone Content of large stones	1.00 0.39 0.08

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
369D: Gogebic-----	30	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00
Peshekee-----	15	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.02	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.02	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.02
Rock outcrop-----	15	Not rated		Not rated		Not rated	
369E: Michigamme-----	30	Very limited Slope Depth to hard bedrock	1.00 0.35	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 0.35
Schweitzer-----	25	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 0.99 0.32	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 1.00 0.32	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 0.99 0.32
Peshekee-----	20	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.02	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.02	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.02
Rock outcrop-----	15	Not rated		Not rated		Not rated	
369F: Michigamme-----	30	Very limited Slope Depth to hard bedrock	1.00 0.35	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 0.35
Schweitzer-----	25	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 0.99 0.32	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 1.00 0.32	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 0.99 0.32
Peshekee-----	20	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.02	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.02	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.02
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
370E: Peshekee-----	55	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.02	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.02	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.02
Rock outcrop-----	40	Not rated		Not rated		Not rated	
370F: Peshekee-----	55	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.02	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.02	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.02
Rock outcrop-----	40	Not rated		Not rated		Not rated	
375: Dumps and Pits, mine	95	Not rated		Not rated		Not rated	
380: Beseman-----	55	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00
Greenwood-----	40	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00
382: Cathro-----	45	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00
Arnheim-----	44	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00
388: Gay-----	50	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
388: Tula-----	40	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 0.65	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 0.65
398B: Tula-----	50	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 0.65	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 0.65
Gay-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Wakefield-----	15	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00
418: Loxley-----	45	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00
Beseman-----	41	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00
419: Pleine-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Cathro-----	30	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00
Gay-----	25	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
424: Gay-----	85	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
425: Foxpaw-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Gay-----	40	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
428C: Gogebic-----	70	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope Depth to thick cemented pan	1.00 1.00 1.00
Michigamme-----	25	Somewhat limited Slope Depth to hard bedrock	0.63 0.46	Very limited Depth to hard bedrock Slope	1.00 0.63	Very limited Slope Depth to hard bedrock	1.00 0.46
428D: Gogebic-----	70	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00
Michigamme-----	25	Very limited Slope Depth to hard bedrock	1.00 0.46	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 0.46
429B: Gogebic-----	79	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00
Peshekee-----	15	Very limited Depth to hard bedrock Content of large stones	1.00 0.02	Very limited Depth to hard bedrock Content of large stones	1.00 0.02	Very limited Depth to hard bedrock Content of large stones	1.00 0.02

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
429C: Gogebic-----	79	Very limited Depth to saturated zone Depth to thick cemented pan Slope	 1.00 1.00 0.63	Very limited Depth to saturated zone Depth to thick cemented pan Slope	 1.00 1.00 0.63	Very limited Depth to saturated zone Slope Depth to thick cemented pan	 1.00 1.00 1.00
Peshekee-----	15	Very limited Depth to hard bedrock Slope Content of large stones	 1.00 0.63 0.02	Very limited Depth to hard bedrock Slope Content of large stones	 1.00 0.63 0.02	Very limited Depth to hard bedrock Slope Content of large stones	 1.00 1.00 0.02
429D: Gogebic-----	75	Very limited Slope Depth to saturated zone Depth to thick cemented pan	 1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	 1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	 1.00 1.00 1.00
Peshekee-----	15	Very limited Slope Depth to hard bedrock Content of large stones	 1.00 1.00 0.02	Very limited Slope Depth to hard bedrock Content of large stones	 1.00 1.00 0.02	Very limited Slope Depth to hard bedrock Content of large stones	 1.00 1.00 0.02
429E: Schweitzer-----	60	Very limited Slope Depth to thick cemented pan Content of large stones	 1.00 0.99 0.32	Very limited Slope Depth to thick cemented pan Content of large stones	 1.00 1.00 0.32	Very limited Slope Depth to thick cemented pan Content of large stones	 1.00 0.99 0.32
Peshekee-----	35	Very limited Slope Depth to hard bedrock Content of large stones	 1.00 1.00 0.02	Very limited Slope Depth to hard bedrock Content of large stones	 1.00 1.00 0.02	Very limited Slope Depth to hard bedrock Content of large stones	 1.00 1.00 0.02
430B: Stutts-----	90	Not limited		Not limited		Not limited	
430C: Stutts-----	90	Somewhat limited Slope	 0.63	Somewhat limited Slope	 0.63	Very limited Slope	 1.00
430D: Stutts-----	90	Very limited Slope	 1.00	Very limited Slope	 1.00	Very limited Slope	 1.00
430E: Stutts-----	90	Very limited Slope	 1.00	Very limited Slope	 1.00	Very limited Slope	 1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
432C: Gogebic-----	68	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope Depth to thick cemented pan	1.00 1.00 1.00
Michigamme-----	15	Somewhat limited Slope Depth to hard bedrock	0.63 0.35	Very limited Depth to hard bedrock Slope	1.00 0.63	Very limited Slope Depth to hard bedrock	1.00 0.35
Rock outcrop-----	15	Not rated		Not rated		Not rated	
432D: Gogebic-----	68	Very limited Depth to saturated zone Slope Depth to thick cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 1.00	Very limited Depth to saturated zone Slope Depth to thick cemented pan	1.00 1.00 1.00
Michigamme-----	15	Very limited Slope Depth to hard bedrock	1.00 0.35	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 0.35
Rock outcrop-----	15	Not rated		Not rated		Not rated	
432E: Schweitzer-----	45	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 0.99 0.32	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 1.00 0.32	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 0.99 0.32
Michigamme-----	20	Very limited Slope Depth to hard bedrock	1.00 0.46	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 0.46
Rock outcrop-----	20	Not rated		Not rated		Not rated	
432F: Schweitzer-----	45	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 0.99 0.32	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 1.00 0.32	Very limited Slope Depth to thick cemented pan Content of large stones	1.00 0.99 0.32
Michigamme-----	20	Very limited Slope Depth to hard bedrock	1.00 0.46	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 0.46
Rock outcrop-----	20	Not rated		Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
433B: McMillan-----	85	Not limited		Not limited		Not limited	
433C: McMillan-----	85	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
433D: McMillan-----	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
435C: Kalkaska-----	45	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
Waiska-----	40	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
435D: Kalkaska-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Waiska-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
435E: Kalkaska-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Waiska-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
437B: Manitowish-----	65	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
Channing-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
448F: Rockland-----	75	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Rock outcrop-----	25	Not rated		Not rated		Not rated	
449C: Flintsteel-----	70	Somewhat limited Depth to saturated zone Slope	0.98 0.63	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Slope Depth to saturated zone	1.00 0.98
Minocqua-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
452F: Rockland-----	90	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
460B: Belding-----	55	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Manido-----	25	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
461B: Loggerhead-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
462C: Nonesuch-----	75	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Very limited Slope	1.00
		Slope	0.04	Depth to thin cemented pan	0.95	Depth to saturated zone	0.98
				Depth to hard bedrock	0.42		
				Depth to soft bedrock	0.15		
				Slope	0.04		
Rock outcrop-----	15	Not rated		Not rated		Not rated	
509: Cathro-----	45	Very limited Subsidence	1.00	Very limited Subsidence	1.00	Very limited Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Ponding	1.00	Organic matter content	1.00
		Ponding	1.00			Ponding	1.00
Minocqua-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
511A: Gogebic-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Depth to thick cemented pan	1.00	Depth to thick cemented pan	1.00	Depth to thick cemented pan	1.00
Tula-----	30	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Depth to thick cemented pan	0.65	Depth to thick cemented pan	1.00	Depth to thick cemented pan	0.65

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
511A: Chabeneau-----	15	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.98
519B: Gogebic-----	50	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00
Karlin-----	40	Not limited		Not limited		Not limited	
519C: Gogebic-----	50	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope Depth to thick cemented pan	1.00 1.00 1.00
Karlin-----	40	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
519D: Gogebic-----	50	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00
Karlin-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
522: Pits, sand and gravel-----	100	Not rated		Not rated		Not rated	
523D: Gogebic, sandy substratum-----	53	Very limited Depth to saturated zone Slope Depth to thick cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 1.00	Very limited Depth to saturated zone Slope Depth to thick cemented pan	1.00 1.00 1.00
Karlin-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
524C: Waiska-----	45	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Amasa-----	40	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
524D: Waiska-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Amasa-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
524E: Waiska-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Amasa-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
527B: Wakefield-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Depth to thick cemented pan	1.00	Depth to thick cemented pan	1.00	Depth to thick cemented pan	1.00
527C: Wakefield-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Depth to thick cemented pan	1.00	Depth to thick cemented pan	1.00	Depth to thick cemented pan	1.00
		Slope	0.63	Slope	0.63	Slope	1.00
527D: Wakefield-----	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thick cemented pan	1.00	Depth to thick cemented pan	1.00	Depth to thick cemented pan	1.00
528B: Gogebic-----	48	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Depth to thick cemented pan	1.00	Depth to thick cemented pan	1.00	Depth to thick cemented pan	1.00
Annalake-----	45	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.98
528C: Gogebic-----	48	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
		Depth to thick cemented pan	1.00	Depth to thick cemented pan	1.00	Slope	1.00
		Slope	0.63	Slope	0.63	Depth to thick cemented pan	1.00
Annalake-----	45	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Very limited Slope	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	0.98

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
528D: Gogebic-----	48	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00
Annalake-----	45	Very limited Slope Depth to saturated zone	1.00 0.98	Very limited Slope Depth to saturated zone	1.00 1.00	Very limited Slope Depth to saturated zone	1.00 0.98
551B: Gogebic-----	65	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00
Dishno-----	30	Somewhat limited Depth to saturated zone Content of large stones	0.39 0.08	Very limited Depth to saturated zone Depth to hard bedrock Content of large stones	1.00 0.96 0.08	Somewhat limited Depth to saturated zone Content of large stones	0.39 0.08
566: Beach, rubbly-----	95	Not rated		Not rated		Not rated	
576B: Flintsteel-----	45	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.98
Loggerhead-----	40	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.98
576C: Flintsteel-----	45	Somewhat limited Depth to saturated zone Slope	0.98 0.16	Very limited Depth to saturated zone Slope	1.00 0.16	Very limited Slope Depth to saturated zone	1.00 0.98
Loggerhead-----	40	Somewhat limited Depth to saturated zone Slope	0.98 0.16	Very limited Depth to saturated zone Slope	1.00 0.16	Very limited Slope Depth to saturated zone	1.00 0.98
576D: Flintsteel-----	45	Very limited Slope Depth to saturated zone	1.00 0.98	Very limited Slope Depth to saturated zone	1.00 1.00	Very limited Slope Depth to saturated zone	1.00 0.98

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
576D: Loggerhead-----	40	Very limited Slope Depth to saturated zone	1.00 0.98	Very limited Slope Depth to saturated zone	1.00 1.00	Very limited Slope Depth to saturated zone	1.00 0.98
577B: Loggerhead-----	35	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.98
Chabeneau-----	30	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.98
Arcadian-----	25	Very limited Depth to hard bedrock	1.00	Very limited Depth to hard bedrock	1.00	Very limited Depth to hard bedrock	1.00
577C: Loggerhead-----	35	Somewhat limited Depth to saturated zone Slope	0.98 0.16	Very limited Depth to saturated zone Slope	1.00 0.16	Very limited Slope Depth to saturated zone	1.00 0.98
Chabeneau-----	30	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone Slope	0.98 0.50
Arcadian-----	25	Very limited Depth to hard bedrock Slope	1.00 0.63	Very limited Depth to hard bedrock Slope	1.00 0.63	Very limited Depth to hard bedrock Slope	1.00 1.00
577D: Loggerhead-----	35	Very limited Slope Depth to saturated zone	1.00 0.98	Very limited Slope Depth to saturated zone	1.00 1.00	Very limited Slope Depth to saturated zone	1.00 0.98
Chabeneau-----	30	Very limited Slope Depth to saturated zone	1.00 0.98	Very limited Depth to saturated zone Slope	1.00 1.00	Very limited Slope Depth to saturated zone	1.00 0.98
Arcadian-----	25	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
578D: Arcadian-----	59	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Keweenaw-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
625B: Fence-----	95	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.98
625C: Fence-----	98	Somewhat limited Depth to saturated zone Slope	0.98 0.63	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Slope Depth to saturated zone	1.00 0.98
626D: Sporley-----	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
626E: Sporley-----	90	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
648B: Annalake-----	93	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.98
648C: Annalake-----	93	Somewhat limited Depth to saturated zone Slope	0.98 0.63	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Slope Depth to saturated zone	1.00 0.98
650: Leafriver-----	90	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
652B: Manido-----	52	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
Annalake-----	24	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.98
656B: Stutts-----	60	Not limited		Not limited		Not limited	
Zandi-----	30	Not limited		Not limited		Not limited	
656C: Stutts-----	60	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Zandi-----	30	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
656D: Stutts-----	60	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Zandi-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
680B: Tonkey-----	37	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Pleine-----	32	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Annalake-----	20	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.98
681: Cathro-----	45	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00
Tonkey-----	37	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
683B: Amasa-----	45	Not limited		Not limited		Not limited	
Oldman-----	40	Very limited Depth to saturated zone Content of large stones Depth to thick cemented pan	1.00 0.96 0.95	Very limited Depth to saturated zone Depth to thick cemented pan Content of large stones	1.00 1.00 0.96	Very limited Depth to saturated zone Content of large stones Depth to thick cemented pan	1.00 0.96 0.95
683C: Amasa-----	45	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Oldman-----	40	Very limited Depth to saturated zone Content of large stones Depth to thick cemented pan Slope	1.00 0.96 0.95 0.63	Very limited Depth to saturated zone Depth to thick cemented pan stones Slope	1.00 1.00 0.96 0.63	Very limited Depth to saturated zone Slope Content of large stones Depth to thick cemented pan	1.00 1.00 0.96 0.95

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
683D: Amasa-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Oldman-----	40	Very limited Slope Depth to saturated zone Content of large stones Depth to thick cemented pan	1.00 1.00 0.96 0.95	Very limited Slope Depth to saturated zone Depth to thick cemented pan stones	1.00 1.00 1.00 0.96	Very limited Slope Depth to saturated zone Content of large stones Depth to thick cemented pan	1.00 1.00 0.96 0.95
684B: Amasa-----	70	Not limited		Not limited		Not limited	
684C: Amasa-----	78	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
684D: Amasa-----	78	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
686B: Annalake-----	40	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.98
Robago-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
688: Cathro-----	60	Very limited Subsidence Flooding Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Subsidence Flooding Depth to saturated zone Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Flooding Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00 1.00
Leafriver-----	40	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00
689B: Chabeneau-----	35	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.98
Channing-----	30	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
689B: Gogebic-----	25	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00
691B: Dishno-----	35	Somewhat limited Depth to saturated zone Content of large stones	0.39 0.08	Very limited Depth to saturated zone Depth to hard bedrock Content of large stones	1.00 0.96 0.08	Somewhat limited Depth to saturated zone Content of large stones	0.39 0.08
Tula-----	30	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 0.65	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 0.65
Rock outcrop-----	20	Not rated		Not rated		Not rated	
691D: Dishno-----	35	Very limited Slope Depth to saturated zone Content of large stones	1.00 0.39 0.08	Very limited Depth to saturated zone Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.96 0.08	Very limited Slope Depth to saturated zone Content of large stones	1.00 0.39 0.08
Tula-----	30	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 0.65	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 0.65
Rock outcrop-----	20	Not rated		Not rated		Not rated	
693B: Chabeneau-----	50	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.98
Annalake-----	40	Somewhat limited Depth to saturated zone	0.98	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.98
694D: Annalake-----	40	Very limited Slope Depth to saturated zone	1.00 0.98	Very limited Depth to saturated zone Slope	1.00 1.00	Very limited Slope Depth to saturated zone	1.00 0.98
Stutts-----	35	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
694D: Arnheim-----	25	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00
5170: Minocqua-----	50	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Pleine-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Cathro-----	15	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00
5171B: Tula-----	60	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 0.65	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 0.65
Wormet-----	15	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Gogebic, sandy substratum-----	15	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00
5172B: Gogebic, sandy substratum-----	60	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00
Pence-----	15	Not limited		Not limited		Not limited	
Cathro-----	15	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12a.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
5172C: Gogebic, sandy substratum-----	60	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope Depth to thick cemented pan	1.00 1.00 1.00
Pence-----	15	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Cathro-----	15	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00
5172D: Gogebic, sandy substratum-----	60	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00
Pence-----	15	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Cathro-----	15	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00
5173D: Gogebic, sandy substratum-----	60	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00
Pence-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
7:					
Histosols-----	60	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
		Frost action	1.00		
Aquents-----	40	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00		
10:					
Witbeck-----	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Ponding	1.00	Ponding	1.00
12A:					
Monico-----	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.10
13B:					
Argonne-----	83	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
				Depth to thin cemented pan	0.01
13C:					
Argonne-----	83	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Slope	0.63	Slope	0.63
				Depth to thin cemented pan	0.01
13D:					
Argonne-----	86	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
				Depth to thin cemented pan	0.01

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
15B: Wabeno-----	100	Somewhat limited Depth to thin cemented pan Frost action Depth to saturated zone	1.00 0.50 0.03	Very limited Depth to thin cemented pan Depth to saturated zone Dense layer Cutbanks cave	1.00 1.00 0.50 0.10
15C: Wabeno-----	100	Somewhat limited Depth to thin cemented pan Slope Frost action Depth to saturated zone	1.00 0.63 0.50 0.03	Very limited Depth to thin cemented pan Depth to saturated zone Slope Dense layer Cutbanks cave	1.00 1.00 0.63 0.50 0.10
16A: Fence-----	100	Very limited Frost action Depth to saturated zone	1.00 0.75	Very limited Depth to saturated zone Cutbanks cave	1.00 0.10
17B: Lode-----	85	Somewhat limited Frost action	0.50	Very limited Cutbanks cave	1.00
17C: Lode-----	86	Somewhat limited Slope Frost action	0.63 0.50	Very limited Cutbanks cave Slope	1.00 0.63
20B: Pence-----	62	Not limited		Very limited Cutbanks cave	1.00
Lode-----	30	Somewhat limited Frost action	0.50	Very limited Cutbanks cave	1.00
20C: Pence-----	86	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63
21: Minocqua-----	60	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00
Leafriver-----	30	Very limited Depth to saturated zone Ponding Frost action	1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
23B:					
Chabeneau-----	57	Somewhat limited		Very limited	
		Depth to	0.75	Depth to	1.00
		saturated zone		saturated zone	
		Frost action	0.50	Cutbanks cave	1.00
Karlin-----	28	Not limited		Very limited	
				Cutbanks cave	1.00
Pence-----	15	Not limited		Very limited	
				Cutbanks cave	1.00
26B:					
Stambaugh-----	90	Very limited		Very limited	
		Frost action	1.00	Cutbanks cave	1.00
27:					
Lupton-----	50	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Subsidence	1.00	Organic matter	1.00
		Frost action	1.00	content	
		Ponding	1.00	Ponding	1.00
Tawas-----	48	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Subsidence	1.00	Cutbanks cave	1.00
		Frost action	1.00	Ponding	1.00
		Ponding	1.00	Organic matter	1.00
				content	
28:					
Dawson-----	40	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Subsidence	1.00	Cutbanks cave	1.00
		Frost action	1.00	Ponding	1.00
		Ponding	1.00	Organic matter	1.00
				content	
Greenwood-----	35	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Subsidence	1.00	Organic matter	1.00
		Frost action	1.00	content	
		Ponding	1.00	Ponding	1.00
Loxley-----	20	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Subsidence	1.00	Organic matter	1.00
		Frost action	1.00	content	
		Ponding	1.00	Ponding	1.00
29B:					
Pence, very deep					
water table-----	85	Not limited		Very limited	
				Cutbanks cave	1.00

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
31: Evert-----	55	Very limited Depth to saturated zone Flooding Ponding Frost action	 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding Flooding	 1.00 1.00 1.00 0.80
Tawas-----	45	Very limited Depth to saturated zone Subsidence Frost action Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Organic matter content	 1.00 1.00 1.00 1.00
32A: Net-----	100	Very limited Depth to thick cemented pan Depth to saturated zone Frost action	 1.00 1.00 1.00	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 0.50
35A: Beechwood-----	85	Very limited Depth to saturated zone Frost action	 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave	 1.00 0.10
36: Gay-----	58	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Cutbanks cave	 1.00 1.00 0.10
Pleine-----	30	Very limited Depth to saturated zone Frost action Ponding Content of large stones	 1.00 1.00 1.00 0.01	Very limited Depth to saturated zone Cutbanks cave Ponding Content of large stones	 1.00 1.00 1.00 0.01
37B: Gogebic-----	51	Very limited Depth to saturated zone Depth to thick cemented pan Frost action	 1.00 1.00 0.50	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 0.50

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
37B:					
Tula-----	31	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Frost action	1.00	Depth to	1.00
		Depth to thick	0.65	saturated zone	
		cemented pan		Cutbanks cave	1.00
				Dense layer	0.50
Lupton-----	15	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Subsidence	1.00	Organic matter	1.00
		Frost action	1.00	content	
		Ponding	1.00	Ponding	1.00
38B:					
Gogebic, sandy					
substratum-----	95	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Depth to thick	1.00	Depth to	1.00
		cemented pan		saturated zone	
		Frost action	0.50	Cutbanks cave	1.00
				Dense layer	0.50
38C:					
Gogebic, sandy					
substratum-----	95	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Depth to thick	1.00	Depth to	1.00
		cemented pan		saturated zone	
		Slope	0.63	Cutbanks cave	1.00
		Frost action	0.50	Slope	0.63
				Dense layer	0.50
38D:					
Gogebic, sandy					
substratum-----	95	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Slope	1.00	Slope	1.00
		Depth to thick	1.00	Depth to	1.00
		cemented pan		saturated zone	
		Frost action	0.50	Cutbanks cave	1.00
				Dense layer	0.50
39B:					
Gogebic, sandy					
substratum-----	85	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Depth to thick	1.00	Depth to	1.00
		cemented pan		saturated zone	
		Frost action	0.50	Cutbanks cave	1.00
				Dense layer	0.50

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
39C: Gogebic, sandy substratum-----	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to thick cemented pan	1.00
		Depth to thick cemented pan	1.00	Depth to saturated zone	1.00
		Slope	0.63	Cutbanks cave	1.00
		Frost action	0.50	Slope	0.63
				Dense layer	0.50
39D: Gogebic, sandy substratum-----	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to thick cemented pan	1.00
		Slope	1.00	Slope	1.00
		Depth to thick cemented pan	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Cutbanks cave	1.00
				Dense layer	0.50
41: Lupton-----	60	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
		Frost action	1.00	Ponding	1.00
		Ponding	1.00		
Pleine-----	23	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	1.00
		Ponding	1.00	Ponding	1.00
Cathro-----	15	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Ponding	1.00
		Frost action	1.00	Organic matter content	1.00
		Ponding	1.00	Cutbanks cave	0.10
42: Ausable-----	70	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Cutbanks cave	1.00
		Frost action	0.50	Flooding	0.80
Tawas-----	25	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Cutbanks cave	1.00
		Frost action	1.00	Ponding	1.00
		Ponding	1.00	Organic matter content	1.00

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
43B:					
Karlin-----	55	Not limited		Very limited Cutbanks cave	1.00
Pence-----	40	Not limited		Very limited Cutbanks cave	1.00
43C:					
Karlin-----	55	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63
Pence-----	40	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63
43D:					
Karlin-----	55	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
Pence-----	40	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
44B:					
Karlin-----	36	Not limited		Very limited Cutbanks cave	1.00
Keweenaw-----	30	Not limited		Very limited Cutbanks cave	1.00
Sarona, dense substratum-----	25	Not limited		Very limited Cutbanks cave	1.00
44C:					
Karlin-----	36	Very limited Slope	1.00	Very limited Cutbanks cave Slope	1.00 1.00
Keweenaw-----	30	Very limited Slope	1.00	Very limited Cutbanks cave Slope	1.00 1.00
Sarona, dense substratum-----	25	Somewhat limited Slope	0.16	Very limited Cutbanks cave Slope	1.00 0.16
44D:					
Karlin-----	36	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
Keweenaw-----	30	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
44D: Saronia, dense substratum-----	25	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
46C: Amasa-----	54	Somewhat limited Frost action Slope	0.50 0.16	Very limited Cutbanks cave Slope	1.00 0.16
Karlin-----	40	Somewhat limited Slope	0.16	Very limited Cutbanks cave Slope	1.00 0.16
46D: Amasa-----	52	Very limited Slope Frost action	1.00 0.50	Very limited Slope Cutbanks cave	1.00 1.00
Karlin-----	38	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
46E: Amasa-----	52	Very limited Slope Frost action	1.00 0.50	Very limited Slope Cutbanks cave	1.00 1.00
Karlin-----	38	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
46F: Amasa-----	53	Very limited Slope Frost action	1.00 0.50	Very limited Slope Cutbanks cave	1.00 1.00
Karlin-----	37	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
47B: Karlin, very deep water table-----	41	Not limited		Very limited Cutbanks cave	1.00
Noseum-----	35	Somewhat limited Depth to saturated zone	0.19	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
Gay-----	16	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Cutbanks cave	1.00 1.00 0.10

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
48C:					
Karlin-----	75	Very limited Slope	1.00	Very limited Cutbanks cave Slope	1.00 1.00
Michigamme-----	20	Somewhat limited Frost action Depth to hard bedrock Slope	0.50 0.35 0.16	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 0.16 0.10
48F:					
Karlin-----	55	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
Michigamme-----	30	Very limited Slope Frost action Depth to hard bedrock	1.00 0.50 0.46	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10
49B:					
Pelissier-----	52	Not limited		Very limited Cutbanks cave	1.00
Sarwet-----	35	Somewhat limited Depth to saturated zone Frost action	0.75 0.50	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
49C:					
Pelissier-----	50	Very limited Slope	1.00	Very limited Cutbanks cave Slope	1.00 1.00
Sarwet-----	35	Very limited Slope Depth to saturated zone Frost action	1.00 0.75 0.50	Very limited Depth to saturated zone Cutbanks cave Slope	1.00 1.00 1.00
49D:					
Pelissier-----	85	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
52B:					
Pence-----	56	Not limited		Very limited Cutbanks cave	1.00
Vilas-----	35	Not limited		Very limited Cutbanks cave	1.00
52C:					
Pence-----	56	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
52C: Vilas-----	35	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63
53B: Manitowish-----	77	Somewhat limited Depth to saturated zone	0.19	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
Croswell-----	22	Somewhat limited Depth to saturated zone	0.19	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
57B: Karlin-----	70	Not limited		Very limited Cutbanks cave	1.00
Manitowish-----	20	Somewhat limited Depth to saturated zone	0.19	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
57C: Karlin-----	75	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63
Manitowish-----	16	Somewhat limited Slope Depth to saturated zone	0.63 0.19	Very limited Depth to saturated zone Cutbanks cave Slope	1.00 1.00 0.63
58B: Vilas, very deep water table-----	40	Not limited		Very limited Cutbanks cave	1.00
Croswell-----	22	Somewhat limited Depth to saturated zone	0.19	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
Pence, very deep water table-----	20	Not limited		Very limited Cutbanks cave	1.00
61: Tawas-----	60	Very limited Depth to saturated zone Subsidence Frost action Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Organic matter content	1.00 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
61: Kinross-----	30	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Ponding	1.00	Cutbanks cave	1.00
		Frost action	0.50	Ponding	1.00
62B: Pelkie-----	100	Very limited		Very limited	
		Flooding	1.00	Cutbanks cave	1.00
		Frost action	0.50	Depth to	1.00
				saturated zone	
				Flooding	0.60
83: Bowstring-----	90	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Organic matter	1.00
				content	
				Flooding	0.80
141D: Oldman-----	80	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Content of large	0.96	Depth to	1.00
		stones		saturated zone	
		Depth to thick	0.95	Cutbanks cave	1.00
		cemented pan		Content of large	0.96
		Slope	0.63	stones	
		Frost action	0.50	Slope	0.63
141E: Oldman-----	80	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Slope	1.00	Slope	1.00
		Content of large	0.96	Depth to	1.00
		stones		saturated zone	
		Depth to thick	0.95	Cutbanks cave	1.00
		cemented pan		Content of large	0.96
		Frost action	0.50	stones	
141F: Porkies-----	80	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00
		Content of large	0.13	Dense layer	0.50
		stones		Content of large	0.13
				stones	

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
214B: Amnicon-----	60	Very limited Depth to saturated zone Low strength Shrink-swell Frost action	 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Too clayey Cutbanks cave	 1.00 1.00 0.10
Bergland-----	30	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	 1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding Cutbanks cave	 1.00 1.00 1.00 0.10
216B: Amnicon-----	85	Very limited Depth to saturated zone Low strength Shrink-swell Frost action	 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Too clayey Cutbanks cave	 1.00 1.00 0.10
217A: Cuttre-----	85	Very limited Depth to saturated zone Frost action Low strength Shrink-swell	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Cutbanks cave	 1.00 1.00 0.10
218: Bergland-----	80	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	 1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding Cutbanks cave	 1.00 1.00 1.00 0.10
219B: Payseor-----	50	Very limited Depth to saturated zone Frost action	 1.00 1.00	Very limited Depth to saturated zone Too clayey Cutbanks cave	 1.00 1.00 1.00
Froberg-----	40	Very limited Low strength Shrink-swell Depth to saturated zone Frost action	 1.00 1.00 0.75 0.50	Very limited Depth to saturated zone Too clayey Cutbanks cave	 1.00 1.00 0.10

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
222: Matchwood-----	85	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Frost action	1.00	Too clayey	1.00
		Low strength	1.00	Ponding	1.00
		Shrink-swell	1.00	Dense layer	0.50
		Ponding	1.00	Cutbanks cave	0.10
225A: Cuttre-----	50	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Frost action	1.00	Too clayey	1.00
		Low strength	1.00	Cutbanks cave	0.10
		Shrink-swell	1.00		
Bergland-----	40	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Frost action	1.00	Too clayey	1.00
		Low strength	1.00	Ponding	1.00
		Shrink-swell	1.00	Cutbanks cave	0.10
		Ponding	1.00		
226B: Froberg-----	85	Very limited		Very limited	
		Low strength	1.00	Depth to	1.00
		Shrink-swell	1.00	saturated zone	
		Depth to	0.75	Too clayey	1.00
		saturated zone		Cutbanks cave	0.10
		Frost action	0.50		
230B: Moquah-----	55	Somewhat limited		Very limited	
		Frost action	0.50	Cutbanks cave	1.00
		Flooding	0.40	Depth to	0.82
				saturated zone	
Arnheim-----	30	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Frost action	1.00	Cutbanks cave	1.00
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	0.80
231: Matchwood-----	45	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Frost action	1.00	Too clayey	1.00
		Low strength	1.00	Ponding	1.00
		Shrink-swell	1.00	Dense layer	0.50
		Ponding	1.00	Cutbanks cave	0.10

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
231: Dorval-----	35	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Organic matter content	1.00 1.00 1.00 1.00
233: Schaat Creek-----	90	Very limited Depth to saturated zone Frost action Flooding Low strength Shrink-swell	1.00 1.00 1.00 1.00 0.22	Very limited Depth to saturated zone Flooding Cutbanks cave	1.00 0.80 0.10
239D: Miskoaki-----	85	Very limited Slope Low strength Shrink-swell Frost action	1.00 1.00 1.00 0.50	Very limited Slope Too clayey Cutbanks cave	1.00 1.00 0.10
277B: Kellogg, sandy substratum-----	50	Somewhat limited Depth to saturated zone Frost action	0.75 0.50	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
Allendale-----	35	Very limited Depth to saturated zone Low strength Shrink-swell Frost action	1.00 1.00 0.78 0.50	Very limited Depth to saturated zone Cutbanks cave Too clayey	1.00 1.00 0.12
280B: Flintsteel-----	85	Very limited Depth to saturated zone Frost action Low strength	1.00 0.50 0.22	Very limited Depth to saturated zone Dense layer Cutbanks cave	1.00 0.50 0.10
280C: Flintsteel-----	85	Very limited Depth to saturated zone Frost action Low strength Slope	1.00 0.50 0.22 0.16	Very limited Depth to saturated zone Dense layer Slope Cutbanks cave	1.00 0.50 0.16 0.10
282B: Big Iron-----	70	Very limited Depth to saturated zone Frost action	1.00 1.00	Very limited Depth to saturated zone Dense layer Cutbanks cave	1.00 0.50 0.10

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
282B: Flintsteel-----	20	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Frost action	0.50	Dense layer	0.50
		Low strength	0.22	Cutbanks cave	0.10
283B: Loggerhead-----	40	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Frost action	0.50	Cutbanks cave	1.00
Noseum-----	30	Somewhat limited		Very limited	
		Depth to	0.19	Depth to	1.00
		saturated zone		saturated zone	
				Cutbanks cave	1.00
Ubly-----	20	Somewhat limited		Somewhat limited	
		Frost action	0.50	Dense layer	0.50
				Cutbanks cave	0.10
283C: Loggerhead-----	40	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Frost action	0.50	Cutbanks cave	1.00
		Slope	0.16	Slope	0.16
Noseum-----	30	Somewhat limited		Very limited	
		Depth to	0.19	Depth to	1.00
		saturated zone		saturated zone	
		Slope	0.01	Cutbanks cave	1.00
				Slope	0.01
Ubly-----	20	Somewhat limited		Somewhat limited	
		Frost action	0.50	Dense layer	0.50
		Slope	0.01	Cutbanks cave	0.10
				Slope	0.01
284: Aquents-----	55	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Frost action	1.00		
Gull Point-----	40	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Frost action	1.00	Flooding	0.80
		Flooding	1.00	Dense layer	0.50
		Low strength	1.00	Cutbanks cave	0.10
		Shrink-swell	0.44		
285F: Rockland-----	70	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
285F: Arnheim-----	15	Very limited Depth to saturated zone Frost action Flooding Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Flooding	 1.00 1.00 1.00 0.80
286A: Big Iron-----	65	Very limited Depth to saturated zone Frost action	 1.00 1.00	Very limited Depth to saturated zone Dense layer Cutbanks cave	 1.00 0.50 0.10
Belding-----	20	Very limited Depth to saturated zone Frost action Low strength	 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00
287: Trap Falls-----	55	Very limited Depth to saturated zone Frost action Ponding Shrink-swell	 1.00 1.00 1.00 0.22	Very limited Depth to saturated zone Ponding Dense layer Cutbanks cave	 1.00 1.00 0.50 0.10
Tonkey-----	35	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00
289B: Amasa-----	95	Somewhat limited Frost action	 0.50	Very limited Cutbanks cave	 1.00
290B: Flintsteel-----	80	Very limited Depth to saturated zone Frost action Low strength	 1.00 0.50 0.22	Very limited Depth to saturated zone Dense layer Cutbanks cave	 1.00 0.50 0.10
290C: Flintsteel-----	85	Very limited Depth to saturated zone Slope Frost action Low strength	 1.00 0.63 0.50 0.22	Very limited Depth to saturated zone Slope Dense layer Cutbanks cave	 1.00 0.63 0.50 0.10
291B: Kalkaska-----	80	Not limited		Very limited Cutbanks cave	 1.00

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
291D: Kalkaska-----	85	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63
292B: Manido-----	45	Somewhat limited Depth to saturated zone	0.19	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
Richter-----	40	Very limited Depth to saturated zone Frost action	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
293A: Wainola-----	55	Very limited Depth to saturated zone Frost action	1.00 0.50	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
Trap Falls-----	25	Very limited Depth to saturated zone Frost action Ponding Shrink-swell	1.00 1.00 1.00 0.22	Very limited Depth to saturated zone Ponding Dense layer Cutbanks cave	1.00 1.00 0.50 0.10
296B: Manido-----	35	Somewhat limited Depth to saturated zone	0.19	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
Fence-----	30	Very limited Frost action Depth to saturated zone	1.00 0.75	Very limited Depth to saturated zone Cutbanks cave	1.00 0.10
Gogebic, sandy substratum-----	20	Very limited Depth to saturated zone Depth to thick cemented pan Frost action	1.00 1.00 0.50	Very limited Depth to thick cemented pan saturated zone Cutbanks cave Dense layer	1.00 1.00 1.00 0.50
296D: Manido-----	35	Very limited Slope Depth to saturated zone	1.00 0.19	Very limited Slope Depth to saturated zone Cutbanks cave	1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
296D: Sporley-----	30	Very limited Slope Frost action Low strength	 1.00 1.00 0.22	Very limited Slope Cutbanks cave	 1.00 0.10
Gogebic, sandy substratum-----	20	Very limited Depth to saturated zone Slope Depth to thick cemented pan Frost action	 1.00 1.00 1.00 0.50	Very limited Depth to thick cemented pan Slope Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 1.00 0.50
299B: Zandi-----	40	Somewhat limited Frost action	 0.50	Very limited Cutbanks cave	 1.00
Amasa-----	30	Somewhat limited Frost action	 0.50	Very limited Cutbanks cave	 1.00
Flintsteel-----	20	Somewhat limited Depth to saturated zone Frost action Low strength	 0.75 0.50 0.22	Very limited Depth to saturated zone Dense layer Cutbanks cave	 1.00 0.50 0.10
299C: Zandi-----	40	Somewhat limited Slope Frost action	 0.63 0.50	Very limited Cutbanks cave Slope	 1.00 0.63
Amasa-----	30	Somewhat limited Slope Frost action	 0.63 0.50	Very limited Cutbanks cave Slope	 1.00 0.63
Flintsteel-----	20	Somewhat limited Depth to saturated zone Slope Frost action Low strength	 0.75 0.63 0.50 0.22	Very limited Depth to saturated zone Slope Dense layer Cutbanks cave	 1.00 0.63 0.50 0.10
301A: Moodig-----	86	Very limited Depth to saturated zone Frost action	 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00
302B: Manitowish-----	85	Somewhat limited Depth to saturated zone	 0.19	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
302C: Manitowish-----	85	Somewhat limited Slope Depth to saturated zone	0.63 0.19	Very limited Depth to saturated zone Cutbanks cave Slope	1.00 1.00 0.63
303: Bowstring-----	50	Very limited Depth to saturated zone Frost action Flooding Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Organic matter content Flooding	1.00 1.00 1.00 1.00 0.80
Arnheim-----	40	Very limited Depth to saturated zone Frost action Flooding Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Flooding	1.00 1.00 1.00 0.80
305B: Keweenaw-----	45	Not limited		Very limited Cutbanks cave	1.00
Siskiwit-----	40	Somewhat limited Depth to saturated zone	0.19	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
305C: Keweenaw-----	45	Somewhat limited Slope	0.16	Very limited Cutbanks cave Slope	1.00 0.16
Siskiwit-----	40	Somewhat limited Depth to saturated zone	0.19	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
307: Lupton-----	45	Very limited Depth to saturated zone Subsidence Frost action Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	1.00 1.00 1.00 1.00
Cathro-----	45	Very limited Depth to saturated zone Subsidence Frost action Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Organic matter content Cutbanks cave	1.00 1.00 1.00 0.10

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
309: Cathro-----	85	Very limited Depth to saturated zone Subsidence Frost action Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Organic matter content Cutbanks cave	 1.00 1.00 1.00 0.10
310B: Gogebic-----	92	Very limited Depth to saturated zone Depth to thick cemented pan Frost action	 1.00 1.00 0.50	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 0.50
310C: Gogebic-----	92	Very limited Depth to saturated zone Depth to thick cemented pan Slope Frost action	 1.00 1.00 0.63 0.50	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Slope Dense layer	 1.00 1.00 1.00 0.63 0.50
310D: Gogebic-----	92	Very limited Depth to saturated zone Slope Depth to thick cemented pan Frost action	 1.00 1.00 1.00 0.50	Very limited Depth to thick cemented pan Slope Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 1.00 0.50
310E: Schweitzer-----	90	Very limited Slope Depth to thick cemented pan Frost action Content of large stones	 1.00 0.99 0.50 0.32	Very limited Depth to thick cemented pan Slope Cutbanks cave Dense layer Content of large stones	 1.00 1.00 1.00 0.50 0.32
311B: Tula-----	45	Very limited Depth to saturated zone Frost action Depth to thick cemented pan	 1.00 1.00 0.65	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 0.50

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
311B: Gogebic-----	40	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Depth to thick	1.00	Depth to	1.00
		cemented pan		saturated zone	
		Frost action	0.50	Cutbanks cave	1.00
				Dense layer	0.50
312A: Tula-----	35	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Frost action	1.00	Depth to	1.00
		Depth to thick	0.65	saturated zone	
		cemented pan		Cutbanks cave	1.00
				Dense layer	0.50
Foxpaw-----	30	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Frost action	1.00	Cutbanks cave	1.00
		Ponding	1.00	Ponding	1.00
Gay-----	25	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Frost action	1.00	Ponding	1.00
		Ponding	1.00	Cutbanks cave	0.10
316: Gay-----	85	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Frost action	1.00	Ponding	1.00
		Ponding	1.00	Cutbanks cave	0.10
317B: Gogebic-----	95	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Depth to thick	1.00	Depth to	1.00
		cemented pan		saturated zone	
		Frost action	0.50	Cutbanks cave	1.00
				Dense layer	0.50
317C: Gogebic-----	90	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Depth to thick	1.00	Depth to	1.00
		cemented pan		saturated zone	
		Slope	0.63	Cutbanks cave	1.00
		Frost action	0.50	Slope	0.63
				Dense layer	0.50

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
317D: Gogebic-----	88	Very limited Depth to saturated zone Slope Depth to thick cemented pan Frost action	 1.00 1.00 1.00 0.50	Very limited Depth to thick cemented pan Slope Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 1.00 0.50
319B: McMillan-----	45	Not limited		Very limited Cutbanks cave	1.00
Noseum-----	40	Somewhat limited Depth to saturated zone	0.19	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
319C: McMillan-----	45	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63
Islandlake-----	40	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63
319D: McMillan-----	45	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
Islandlake-----	40	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
319E: McMillan-----	45	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
Islandlake-----	40	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
322B: Stutts-----	60	Not limited		Very limited Cutbanks cave	1.00
Keweenaw-----	30	Not limited		Very limited Cutbanks cave	1.00
322C: Stutts-----	60	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
322C: Keweenaw-----	30	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63
322D: Stutts-----	60	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
Keweenaw-----	30	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
323B: Keweenaw-----	50	Not limited		Very limited Cutbanks cave	1.00
Kalkaska-----	40	Not limited		Very limited Cutbanks cave	1.00
323C: Keweenaw-----	50	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63
Kalkaska-----	40	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63
323D: Keweenaw-----	50	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
Kalkaska-----	40	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
325B: Siskiwit-----	55	Somewhat limited Depth to saturated zone	0.19	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
Gogebic-----	45	Very limited Depth to saturated zone Depth to thick cemented pan Frost action	1.00 1.00 0.50	Very limited Depth to thick cemented pan saturated zone Cutbanks cave Dense layer	1.00 1.00 1.00 0.50
325C: Siskiwit-----	55	Somewhat limited Depth to saturated zone	0.19	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
325C: Gogebic-----	45	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Depth to thick	1.00	Depth to	1.00
		cemented pan		saturated zone	
		Frost action	0.50	Cutbanks cave	1.00
		Slope	0.04	Dense layer	0.50
				Slope	0.04
327: Foxpaw-----	60	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Frost action	1.00	Cutbanks cave	1.00
		Ponding	1.00	Ponding	1.00
Sarwet-----	40	Somewhat limited		Very limited	
		Depth to	0.75	Depth to	1.00
		saturated zone		saturated zone	
		Frost action	0.50	Cutbanks cave	1.00
328B: Annalake-----	50	Somewhat limited		Very limited	
		Depth to	0.75	Depth to	1.00
		saturated zone		saturated zone	
		Frost action	0.50	Cutbanks cave	1.00
Karlin-----	36	Not limited		Very limited	
				Cutbanks cave	1.00
328C: Annalake-----	50	Somewhat limited		Very limited	
		Depth to	0.75	Depth to	1.00
		saturated zone		saturated zone	
		Slope	0.63	Cutbanks cave	1.00
		Frost action	0.50	Slope	0.63
Karlin-----	40	Somewhat limited		Very limited	
		Slope	0.63	Cutbanks cave	1.00
				Slope	0.63
328D: Karlin-----	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
				Cutbanks cave	1.00
Zandi-----	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00
329A: Tula-----	90	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Frost action	1.00	Depth to	1.00
		Depth to thick	0.65	saturated zone	
		cemented pan		Cutbanks cave	1.00
				Dense layer	0.50

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
351B: Gogebic-----	85	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Depth to thick	1.00	Depth to	1.00
		cemented pan		saturated zone	
		Frost action	0.50	Cutbanks cave	1.00
				Dense layer	0.50
351C: Gogebic-----	85	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Depth to thick	1.00	Depth to	1.00
		cemented pan		saturated zone	
		Slope	0.63	Cutbanks cave	1.00
		Frost action	0.50	Slope	0.63
				Dense layer	0.50
351D: Gogebic-----	85	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Slope	1.00	Slope	1.00
		Depth to thick	1.00	Depth to	1.00
		cemented pan		saturated zone	
		Frost action	0.50	Cutbanks cave	1.00
				Dense layer	0.50
351E: Schweitzer-----	85	Very limited		Very limited	
		Slope	1.00	Depth to thick	1.00
		Depth to thick	0.99	cemented pan	
		cemented pan		Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00
		Content of large	0.22	Dense layer	0.50
		stones		Content of large	0.22
				stones	
351F: Schweitzer-----	90	Very limited		Very limited	
		Slope	1.00	Depth to thick	1.00
		Depth to thick	0.99	cemented pan	
		cemented pan		Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00
		Content of large	0.22	Dense layer	0.50
		stones		Content of large	0.22
				stones	
353A: Tula-----	85	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Frost action	1.00	Depth to	1.00
		Depth to thick	0.65	saturated zone	
		cemented pan		Cutbanks cave	1.00
				Dense layer	0.50

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
354B: Gogebic-----	90	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Depth to thick	1.00	Depth to	1.00
		cemented pan		saturated zone	
		Frost action	0.50	Cutbanks cave	1.00
				Dense layer	0.50
354C: Gogebic-----	90	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Depth to thick	1.00	Depth to	1.00
		cemented pan		saturated zone	
		Slope	0.63	Cutbanks cave	1.00
		Frost action	0.50	Slope	0.63
				Dense layer	0.50
354D: Gogebic-----	85	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Slope	1.00	Slope	1.00
		Depth to thick	1.00	Depth to	1.00
		cemented pan		saturated zone	
		Frost action	0.50	Cutbanks cave	1.00
				Dense layer	0.50
354E: Schweitzer-----	85	Very limited		Very limited	
		Slope	1.00	Depth to thick	1.00
		Depth to thick	0.99	cemented pan	
		cemented pan		Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00
		Content of large	0.32	Dense layer	0.50
		stones		Content of large	0.32
				stones	
354F: Schweitzer-----	90	Very limited		Very limited	
		Slope	1.00	Depth to thick	1.00
		Depth to thick	0.99	cemented pan	
		cemented pan		Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00
		Content of large	0.32	Dense layer	0.50
		stones		Content of large	0.32
				stones	
363C: Talus-----	50	Not rated		Not rated	
Arcadian-----	35	Very limited		Very limited	
		Depth to hard	1.00	Depth to hard	1.00
		bedrock		bedrock	
		Slope	0.63	Slope	0.63
		Frost action	0.50		

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
363D:					
Talus-----	46	Not rated		Not rated	
Arcadian-----	35	Very limited		Very limited	
		Depth to hard	1.00	Depth to hard	1.00
		bedrock		bedrock	
		Slope	1.00	Slope	1.00
		Frost action	0.50		
363E:					
Talus-----	50	Not rated		Not rated	
Arcadian-----	35	Very limited		Very limited	
		Depth to hard	1.00	Depth to hard	1.00
		bedrock		bedrock	
		Slope	1.00	Slope	1.00
		Frost action	0.50		
363F:					
Talus-----	50	Not rated		Not rated	
Arcadian-----	35	Very limited		Very limited	
		Depth to hard	1.00	Depth to hard	1.00
		bedrock		bedrock	
		Slope	1.00	Slope	1.00
		Frost action	0.50		
364F:					
Talus-----	91	Not rated		Not rated	
365F:					
Rock outcrop-----	90	Not rated		Not rated	
369C:					
Dishno-----	35	Somewhat limited		Very limited	
		Slope	0.63	Depth to	1.00
		Frost action	0.50	saturated zone	
		Depth to	0.19	Cutbanks cave	1.00
		saturated zone		Depth to hard	0.77
		Content of large	0.08	bedrock	
		stones		Slope	0.63
				Content of large	0.08
				stones	
Gogebic-----	30	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Depth to thick	1.00	Depth to	1.00
		cemented pan		saturated zone	
		Slope	0.63	Cutbanks cave	1.00
		Frost action	0.50	Slope	0.63
				Dense layer	0.50
Peshekee-----	15	Very limited		Very limited	
		Depth to hard	1.00	Depth to hard	1.00
		bedrock		bedrock	
		Slope	0.63	Slope	0.63
		Frost action	0.50	Content of large	0.02
		Content of large	0.02	stones	
		stones			

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
369C: Rock outcrop-----	15	Not rated		Not rated	
369D: Dishno-----	35	Very limited Slope Frost action Depth to saturated zone Content of large stones	1.00 0.50 0.19 0.08	Very limited Slope Depth to saturated zone Cutbanks cave Depth to hard bedrock Content of large stones	1.00 1.00 1.00 0.77 0.08
Gogebic-----	30	Very limited Depth to saturated zone Slope Depth to thick cemented pan Frost action	1.00 1.00 1.00 0.50	Very limited Depth to thick cemented pan Slope Depth to saturated zone Cutbanks cave Dense layer	1.00 1.00 1.00 1.00 0.50
Peshekee-----	15	Very limited Depth to hard bedrock Slope Frost action Content of large stones	1.00 1.00 0.50 0.02	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.02
Rock outcrop-----	15	Not rated		Not rated	
369E: Michigamme-----	30	Very limited Slope Frost action Depth to hard bedrock	1.00 0.50 0.35	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10
Schweitzer-----	25	Very limited Slope Depth to thick cemented pan Frost action Content of large stones	1.00 0.99 0.50 0.32	Very limited Depth to thick cemented pan Slope Cutbanks cave Dense layer Content of large stones	1.00 1.00 1.00 0.50 0.32
Peshekee-----	20	Very limited Depth to hard bedrock Slope Frost action Content of large stones	1.00 1.00 0.50 0.02	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.02
Rock outcrop-----	15	Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
369F:					
Michigamme-----	30	Very limited		Very limited	
		Slope	1.00	Depth to hard	1.00
		Frost action	0.50	bedrock	
		Depth to hard	0.35	Slope	1.00
		bedrock		Cutbanks cave	0.10
Schweitzer-----	25	Very limited		Very limited	
		Slope	1.00	Depth to thick	1.00
		Depth to thick	0.99	cemented pan	
		cemented pan		Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00
		Content of large	0.32	Dense layer	0.50
		stones		Content of large	0.32
		stones			
Peshekee-----	20	Very limited		Very limited	
		Depth to hard	1.00	Depth to hard	1.00
		bedrock		bedrock	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Content of large	0.02
		Content of large	0.02	stones	
		stones			
Rock outcrop-----	15	Not rated		Not rated	
370E:					
Peshekee-----	55	Very limited		Very limited	
		Depth to hard	1.00	Depth to hard	1.00
		bedrock		bedrock	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Content of large	0.02
		Content of large	0.02	stones	
		stones			
Rock outcrop-----	40	Not rated		Not rated	
370F:					
Peshekee-----	55	Very limited		Very limited	
		Depth to hard	1.00	Depth to hard	1.00
		bedrock		bedrock	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Content of large	0.02
		Content of large	0.02	stones	
		stones			
Rock outcrop-----	40	Not rated		Not rated	
375:					
Dumps and Pits, mine	95	Not rated		Not rated	
380:					
Beseman-----	55	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Frost action	1.00	Ponding	1.00
		Ponding	1.00	Organic matter	1.00
				content	
				Cutbanks cave	0.10

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
380: Greenwood-----	40	Very limited Depth to saturated zone Subsidence Frost action Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	 1.00 1.00 1.00 1.00
382: Cathro-----	45	Very limited Depth to saturated zone Subsidence Frost action Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Organic matter content Cutbanks cave	 1.00 1.00 1.00 1.00 0.10
Arnheim-----	44	Very limited Depth to saturated zone Frost action Flooding Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Flooding	 1.00 1.00 1.00 0.80
388: Gay-----	50	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Cutbanks cave	 1.00 1.00 0.10
Tula-----	40	Very limited Depth to saturated zone Frost action Depth to thick cemented pan	 1.00 1.00 0.65	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 0.50
398B: Tula-----	50	Very limited Depth to saturated zone Frost action Depth to thick cemented pan	 1.00 1.00 0.65	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 0.50
Gay-----	30	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Cutbanks cave	 1.00 1.00 0.10
Wakefield-----	15	Very limited Depth to thick cemented pan Depth to saturated zone Frost action	 1.00 1.00 0.50	Very limited Depth to thick cemented pan Depth to saturated zone	 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
418: Loxley-----	45	Very limited Depth to saturated zone Subsidence Frost action Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding	 1.00 1.00 1.00 1.00
Beseman-----	41	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Organic matter content Cutbanks cave	 1.00 1.00 1.00 1.00 0.10
419: Pleine-----	45	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00
Cathro-----	30	Very limited Depth to saturated zone Subsidence Frost action Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Organic matter content Cutbanks cave	 1.00 1.00 1.00 1.00 0.10
Gay-----	25	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Cutbanks cave	 1.00 1.00 0.10
424: Gay-----	85	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Cutbanks cave	 1.00 1.00 0.10
425: Foxpaw-----	45	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00
Gay-----	40	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Cutbanks cave	 1.00 1.00 0.10

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
428C: Gogebic-----	70	Very limited Depth to saturated zone Depth to thick cemented pan Slope Frost action	 1.00 1.00 0.63 0.50	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Slope Dense layer	 1.00 1.00 1.00 0.63 0.50
Michigamme-----	25	Somewhat limited Slope Frost action Depth to hard bedrock	 0.63 0.50 0.46	Very limited Depth to hard bedrock Slope Cutbanks cave	 1.00 0.63 0.10
428D: Gogebic-----	70	Very limited Depth to saturated zone Slope Depth to thick cemented pan Frost action	 1.00 1.00 1.00 0.50	Very limited Depth to thick cemented pan Slope Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 1.00 0.50
Michigamme-----	25	Very limited Slope Frost action Depth to hard bedrock	 1.00 0.50 0.46	Very limited Depth to hard bedrock Slope Cutbanks cave	 1.00 1.00 1.00 0.10
429B: Gogebic-----	79	Very limited Depth to saturated zone Depth to thick cemented pan Frost action	 1.00 1.00 0.50	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 0.50
Peshekee-----	15	Very limited Depth to hard bedrock Frost action Content of large stones	 1.00 0.50 0.02	Very limited Depth to hard bedrock Content of large stones	 1.00 0.02
429C: Gogebic-----	79	Very limited Depth to saturated zone Depth to thick cemented pan Slope Frost action	 1.00 1.00 0.63 0.50	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Slope Dense layer	 1.00 1.00 1.00 0.63 0.50

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
429C: Peshekee-----	15	Very limited Depth to hard bedrock Slope Frost action Content of large stones	 1.00 0.63 0.50 0.02	Very limited Depth to hard bedrock Slope Content of large stones	 1.00 0.63 0.02
429D: Gogebic-----	75	Very limited Depth to saturated zone Slope Depth to thick cemented pan Frost action	 1.00 1.00 1.00 0.50	Very limited Depth to thick cemented pan Slope Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 1.00 0.50
Peshekee-----	15	Very limited Depth to hard bedrock Slope Frost action Content of large stones	 1.00 1.00 0.50 0.02	Very limited Depth to hard bedrock Slope Content of large stones	 1.00 1.00 0.02
429E: Schweitzer-----	60	Very limited Slope Depth to thick cemented pan Frost action Content of large stones	 1.00 0.99 0.50 0.32	Very limited Depth to thick cemented pan Slope Cutbanks cave Dense layer Content of large stones	 1.00 1.00 1.00 0.50 0.32
Peshekee-----	35	Very limited Depth to hard bedrock Slope Frost action Content of large stones	 1.00 1.00 0.50 0.02	Very limited Depth to hard bedrock Slope Content of large stones	 1.00 1.00 0.02
430B: Stutts-----	90	Not limited		Very limited Cutbanks cave	 1.00
430C: Stutts-----	90	Somewhat limited Slope	 0.63	Very limited Cutbanks cave Slope	 1.00 0.63
430D: Stutts-----	90	Very limited Slope	 1.00	Very limited Slope Cutbanks cave	 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
430E: Stutts-----	90	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
432C: Gogebic-----	68	Very limited Depth to saturated zone Depth to thick cemented pan Slope Frost action	1.00 1.00 0.63 0.50	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Slope Dense layer	1.00 1.00 1.00 1.00 0.63 0.50
Michigamme-----	15	Somewhat limited Slope Frost action Depth to hard bedrock	0.63 0.50 0.35	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 0.63 0.10
Rock outcrop-----	15	Not rated		Not rated	
432D: Gogebic-----	68	Very limited Depth to saturated zone Slope Depth to thick cemented pan Frost action	1.00 1.00 1.00 0.50	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Slope Dense layer	1.00 1.00 1.00 1.00 0.50
Michigamme-----	15	Very limited Slope Frost action Depth to hard bedrock	1.00 0.50 0.35	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10
Rock outcrop-----	15	Not rated		Not rated	
432E: Schweitzer-----	45	Very limited Slope Depth to thick cemented pan Frost action Content of large stones	1.00 0.99 0.50 0.32	Very limited Depth to thick cemented pan Slope Cutbanks cave Dense layer Content of large stones	1.00 1.00 1.00 0.50 0.32
Michigamme-----	20	Very limited Slope Frost action Depth to hard bedrock	1.00 0.50 0.46	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10
Rock outcrop-----	20	Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
432F: Schweitzer-----	45	Very limited Slope Depth to thick cemented pan Frost action Content of large stones	 1.00 0.99 0.50 0.32	Very limited Depth to thick cemented pan Slope Cutbanks cave Dense layer Content of large stones	 1.00 1.00 1.00 0.50 0.32
Michigamme-----	20	Very limited Slope Frost action Depth to hard bedrock	 1.00 0.50 0.46	Very limited Depth to hard bedrock Slope Cutbanks cave	 1.00 1.00 0.10
Rock outcrop-----	20	Not rated		Not rated	
433B: McMillan-----	85	Not limited		Very limited Cutbanks cave	 1.00
433C: McMillan-----	85	Somewhat limited Slope	 0.63	Very limited Cutbanks cave Slope	 1.00 0.63
433D: McMillan-----	85	Very limited Slope	 1.00	Very limited Slope Cutbanks cave	 1.00 1.00
435C: Kalkaska-----	45	Somewhat limited Slope	 0.16	Very limited Cutbanks cave Slope	 1.00 0.16
Waiska-----	40	Somewhat limited Slope	 0.16	Very limited Cutbanks cave Slope	 1.00 0.16
435D: Kalkaska-----	45	Very limited Slope	 1.00	Very limited Slope Cutbanks cave	 1.00 1.00
Waiska-----	40	Very limited Slope	 1.00	Very limited Slope Cutbanks cave	 1.00 1.00
435E: Kalkaska-----	45	Very limited Slope	 1.00	Very limited Slope Cutbanks cave	 1.00 1.00
Waiska-----	40	Very limited Slope	 1.00	Very limited Slope Cutbanks cave	 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
437B: Manitowish-----	65	Somewhat limited Depth to saturated zone	0.19	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
Channing-----	20	Very limited Depth to saturated zone Frost action	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
448F: Rockland-----	75	Very limited Slope Frost action	1.00 0.50	Very limited Slope Cutbanks cave	1.00 0.10
Rock outcrop-----	25	Not rated		Not rated	
449C: Flintsteel-----	70	Somewhat limited Depth to saturated zone Slope Frost action Low strength	0.75 0.63 0.50 0.22	Very limited Depth to saturated zone Slope Dense layer Cutbanks cave	1.00 0.63 0.50 0.10
Minocqua-----	30	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00
452F: Rockland-----	90	Very limited Slope Frost action	1.00 0.50	Very limited Slope Cutbanks cave	1.00 0.10
460B: Belding-----	55	Very limited Depth to saturated zone Frost action Low strength	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
Manido-----	25	Somewhat limited Depth to saturated zone	0.19	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
461B: Loggerhead-----	85	Very limited Depth to saturated zone Frost action	1.00 0.50	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
462C: Nonesuch-----	75	Somewhat limited Depth to saturated zone Frost action Slope	0.75 0.50 0.04	Very limited Depth to saturated zone Cutbanks cave Depth to thin cemented pan Dense layer Depth to hard bedrock	1.00 1.00 0.95 0.50 0.42
Rock outcrop-----	15	Not rated		Not rated	
509: Cathro-----	45	Very limited Depth to saturated zone Subsidence Frost action Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Organic matter content Cutbanks cave	1.00 1.00 1.00 0.10
Minocqua-----	40	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00
511A: Gogebic-----	40	Very limited Depth to saturated zone Depth to thick cemented pan Frost action	1.00 1.00 0.50	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	1.00 1.00 1.00 0.50
Tula-----	30	Very limited Depth to saturated zone Frost action Depth to thick cemented pan	1.00 1.00 0.65	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	1.00 1.00 1.00 0.50
Chabeneau-----	15	Somewhat limited Depth to saturated zone Frost action	0.75 0.50	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
519B: Gogebic-----	50	Very limited Depth to saturated zone Depth to thick cemented pan Frost action	1.00 1.00 0.50	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	1.00 1.00 1.00 0.50

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
519B: Karlin-----	40	Not limited		Very limited Cutbanks cave	1.00
519C: Gogebic-----	50	Very limited Depth to saturated zone Depth to thick cemented pan Slope Frost action	1.00 1.00 0.63 0.50	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Slope Dense layer	1.00 1.00 1.00 1.00 0.63 0.50
Karlin-----	40	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63
519D: Gogebic-----	50	Very limited Depth to saturated zone Slope Depth to thick cemented pan Frost action	1.00 1.00 1.00 0.50	Very limited Depth to thick cemented pan Slope Depth to saturated zone Cutbanks cave Dense layer	1.00 1.00 1.00 1.00 0.50
Karlin-----	40	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
522: Pits, sand and gravel-----	100	Not rated		Not rated	
523D: Gogebic, sandy substratum-----	53	Very limited Depth to saturated zone Slope Depth to thick cemented pan Frost action	1.00 1.00 1.00 0.50	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Slope Dense layer	1.00 1.00 1.00 1.00 0.50
Karlin-----	40	Very limited Slope	1.00	Very limited Cutbanks cave Slope	1.00 1.00
524C: Waiska-----	45	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63
Amasa-----	40	Somewhat limited Slope Frost action	0.63 0.50	Very limited Cutbanks cave Slope	1.00 0.63

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
524D:					
Waiska-----	45	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
Amasa-----	40	Very limited Slope Frost action	1.00 0.50	Very limited Slope Cutbanks cave	1.00 1.00
524E:					
Waiska-----	45	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
Amasa-----	40	Very limited Slope Frost action	1.00 0.50	Very limited Slope Cutbanks cave	1.00 1.00
527B:					
Wakefield-----	85	Very limited Depth to thick cemented pan Depth to saturated zone Frost action	1.00 1.00 0.50	Very limited Depth to thick cemented pan Depth to saturated zone	1.00 1.00
527C:					
Wakefield-----	85	Very limited Depth to thick cemented pan Depth to saturated zone Slope Frost action	1.00 1.00 0.63 0.50	Very limited Depth to thick cemented pan Depth to saturated zone Slope	1.00 1.00 0.63
527D:					
Wakefield-----	85	Very limited Depth to thick cemented pan Depth to saturated zone Slope Frost action	1.00 1.00 1.00 0.50	Very limited Depth to thick cemented pan Slope Depth to saturated zone	1.00 1.00 1.00
528B:					
Gogebic-----	48	Very limited Depth to saturated zone Depth to thick cemented pan Frost action	1.00 1.00 0.50	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	1.00 1.00 1.00 0.50
Annalake-----	45	Very limited Frost action Depth to saturated zone	1.00 0.75	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
528C: Gogebic-----	48	Very limited Depth to saturated zone Depth to thick cemented pan Slope Frost action	 1.00 1.00 0.63 0.50	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Slope Dense layer	 1.00 1.00 1.00 0.63 0.50
Annalake-----	45	Very limited Frost action Depth to saturated zone Slope	 1.00 0.75 0.63	Very limited Depth to saturated zone Cutbanks cave Slope	 1.00 1.00 0.63
528D: Gogebic-----	48	Very limited Depth to saturated zone Slope Depth to thick cemented pan Frost action	 1.00 1.00 1.00 0.50	Very limited Depth to thick cemented pan Slope Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 1.00 1.00 0.50
Annalake-----	45	Very limited Slope Frost action Depth to saturated zone	 1.00 1.00 0.75	Very limited Slope Depth to saturated zone Cutbanks cave	 1.00 1.00 1.00
551B: Gogebic-----	65	Very limited Depth to saturated zone Depth to thick cemented pan Frost action	 1.00 1.00 0.50	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 1.00 0.50
Dishno-----	30	Somewhat limited Frost action Depth to saturated zone Content of large stones	 0.50 0.19 0.08	Very limited Depth to saturated zone Cutbanks cave Depth to hard bedrock Content of large stones	 1.00 1.00 0.96 0.08
566: Beach, rubbly-----	95	Not rated		Not rated	
576B: Flintsteel-----	45	Somewhat limited Depth to saturated zone Frost action Low strength	 0.75 0.50 0.22	Very limited Depth to saturated zone Dense layer Cutbanks cave	 1.00 0.50 0.10

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
576B: Loggerhead-----	40	Somewhat limited Depth to saturated zone Frost action	0.75 0.50	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
576C: Flintsteel-----	45	Somewhat limited Depth to saturated zone Frost action Low strength Slope	0.75 0.50 0.22 0.16	Very limited Depth to saturated zone Dense layer Slope Cutbanks cave	1.00 0.50 0.16 0.10
Loggerhead-----	40	Somewhat limited Depth to saturated zone Frost action Slope	0.75 0.50 0.16	Very limited Depth to saturated zone Cutbanks cave Slope	1.00 1.00 0.16
576D: Flintsteel-----	45	Very limited Slope Depth to saturated zone Frost action Low strength	1.00 0.75 0.50 0.22	Very limited Slope Depth to saturated zone Dense layer Cutbanks cave	1.00 1.00 0.50 0.10
Loggerhead-----	40	Very limited Slope Depth to saturated zone Frost action	1.00 0.75 0.50	Very limited Slope Depth to saturated zone Cutbanks cave	1.00 1.00 1.00
577B: Loggerhead-----	35	Somewhat limited Depth to saturated zone Frost action	0.75 0.50	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
Chabeneau-----	30	Somewhat limited Depth to saturated zone Frost action	0.75 0.50	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
Arcadian-----	25	Very limited Depth to hard bedrock Frost action	1.00 0.50	Very limited Depth to hard bedrock	1.00
577C: Loggerhead-----	35	Somewhat limited Depth to saturated zone Frost action Slope	0.75 0.50 0.16	Very limited Depth to saturated zone Cutbanks cave Slope	1.00 1.00 0.16

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
577C: Chabeneau-----	30	Somewhat limited Depth to saturated zone Frost action	0.75 0.50	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
Arcadian-----	25	Very limited Depth to hard bedrock Slope Frost action	1.00 0.63 0.50	Very limited Depth to hard bedrock Slope	1.00 0.63
577D: Loggerhead-----	35	Very limited Slope Depth to saturated zone Frost action	1.00 0.75 0.50	Very limited Slope Depth to saturated zone Cutbanks cave	1.00 1.00 1.00
Chabeneau-----	30	Very limited Slope Depth to saturated zone Frost action	1.00 0.75 0.50	Very limited Depth to saturated zone Cutbanks cave Slope	1.00 1.00 1.00
Arcadian-----	25	Very limited Depth to hard bedrock Slope Frost action	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope	1.00 1.00
578D: Arcadian-----	59	Very limited Depth to hard bedrock Slope Frost action	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope	1.00 1.00
Keweenaw-----	40	Very limited Slope	1.00	Very limited Cutbanks cave Slope	1.00 1.00
625B: Fence-----	95	Very limited Frost action Depth to saturated zone	1.00 0.75	Very limited Depth to saturated zone Cutbanks cave	1.00 0.10
625C: Fence-----	98	Very limited Frost action Depth to saturated zone Slope	1.00 0.75 0.63	Very limited Depth to saturated zone Slope Cutbanks cave	1.00 0.63 0.10
626D: Sporley-----	85	Very limited Slope Frost action Low strength	1.00 1.00 0.22	Very limited Slope Cutbanks cave	1.00 0.10

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
626E: Sporley-----	90	Very limited Slope Frost action Low strength	 1.00 1.00 0.22	Very limited Slope Cutbanks cave	 1.00 0.10
648B: Annalake-----	93	Very limited Frost action Depth to saturated zone	 1.00 0.75	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00
648C: Annalake-----	93	Very limited Frost action Depth to saturated zone Slope	 1.00 0.75 0.63	Very limited Depth to saturated zone Cutbanks cave Slope	 1.00 1.00 0.63
650: Leafriver-----	90	Very limited Depth to saturated zone Ponding Frost action	 1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00
652B: Manido-----	52	Somewhat limited Depth to saturated zone	 0.19	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00
Annalake-----	24	Very limited Frost action Depth to saturated zone	 1.00 0.75	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00
656B: Stutts-----	60	Not limited		Very limited Cutbanks cave	 1.00
Zandi-----	30	Somewhat limited Frost action	 0.50	Very limited Cutbanks cave	 1.00
656C: Stutts-----	60	Somewhat limited Slope	 0.63	Very limited Cutbanks cave Slope	 1.00 0.63
Zandi-----	30	Somewhat limited Slope Frost action	 0.63 0.50	Very limited Cutbanks cave Slope	 1.00 0.63
656D: Stutts-----	60	Very limited Slope	 1.00	Very limited Slope Cutbanks cave	 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
656D: Zandi-----	30	Very limited Slope Frost action	 1.00 0.50	Very limited Slope Cutbanks cave	 1.00 1.00
680B: Tonkey-----	37	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Cutbanks cave	 1.00 1.00 0.10
Pleine-----	32	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00
Annalake-----	20	Very limited Frost action Depth to saturated zone	 1.00 0.75	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00
681: Cathro-----	45	Very limited Depth to saturated zone Subsidence Frost action Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Organic matter content Cutbanks cave	 1.00 1.00 1.00 0.10
Tonkey-----	37	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Cutbanks cave	 1.00 1.00 0.10
683B: Amasa-----	45	Somewhat limited Frost action	 0.50	Very limited Cutbanks cave	 1.00
Oldman-----	40	Very limited Depth to saturated zone Content of large stones Depth to thick cemented pan Frost action	 1.00 0.96 0.95 0.50	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Content of large stones Dense layer	 1.00 1.00 1.00 0.96 0.50
683C: Amasa-----	45	Somewhat limited Slope Frost action	 0.63 0.50	Very limited Cutbanks cave Slope	 1.00 0.63

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
683C: Oldman-----	40	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Content of large	0.96	Depth to	1.00
		stones		saturated zone	
		Depth to thick	0.95	Cutbanks cave	1.00
		cemented pan		Content of large	0.96
		Slope	0.63	stones	
		Frost action	0.50	Slope	0.63
683D: Amasa-----	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00
Oldman-----	40	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Slope	1.00	Slope	1.00
		Content of large	0.96	Depth to	1.00
		stones		saturated zone	
		Depth to thick	0.95	Cutbanks cave	1.00
		cemented pan		Content of large	0.96
		Frost action	0.50	stones	
684B: Amasa-----	70	Somewhat limited		Very limited	
		Frost action	0.50	Cutbanks cave	1.00
684C: Amasa-----	78	Somewhat limited		Very limited	
		Slope	0.63	Cutbanks cave	1.00
		Frost action	0.50	Slope	0.63
684D: Amasa-----	78	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00
686B: Annalake-----	40	Very limited		Very limited	
		Frost action	1.00	Depth to	1.00
		Depth to	0.75	saturated zone	
		saturated zone		Cutbanks cave	1.00
Robago-----	40	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Frost action	1.00	Cutbanks cave	1.00
688: Cathro-----	60	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Subsidence	1.00	Ponding	1.00
		Frost action	1.00	Organic matter	1.00
		Flooding	1.00	content	
		Ponding	1.00	Flooding	0.80
				Cutbanks cave	0.10

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
688: Leafriver-----	40	Very limited Depth to saturated zone Flooding Ponding Frost action	 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Ponding Flooding	 1.00 1.00 1.00 0.80
689B: Chabeneau-----	35	Somewhat limited Depth to saturated zone Frost action	 0.75 0.50	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00
Channing-----	30	Very limited Depth to saturated zone Frost action	 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00
Gogebic-----	25	Very limited Depth to saturated zone Depth to thick cemented pan Frost action	 1.00 1.00 0.50	Very limited Depth to thick cemented pan saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 0.50
691B: Dishno-----	35	Somewhat limited Frost action Depth to saturated zone Content of large stones	 0.50 0.19 0.08	Very limited Depth to saturated zone Cutbanks cave Depth to hard bedrock Content of large stones	 1.00 1.00 0.96 0.08
Tula-----	30	Very limited Depth to saturated zone Frost action Depth to thick cemented pan	 1.00 1.00 0.65	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 0.50
Rock outcrop-----	20	Not rated		Not rated	
691D: Dishno-----	35	Very limited Slope Frost action Depth to saturated zone Content of large stones	 1.00 0.50 0.19 0.08	Very limited Depth to saturated zone Cutbanks cave Slope Depth to hard bedrock Content of large stones	 1.00 1.00 1.00 0.96 0.08

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
691D: Tula-----	30	Very limited Depth to saturated zone Frost action Depth to thick cemented pan	 1.00 1.00 0.65	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 0.50
Rock outcrop-----	20	Not rated		Not rated	
693B: Chabeneau-----	50	Somewhat limited Depth to saturated zone Frost action	 0.75 0.50	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00
Annalake-----	40	Very limited Frost action Depth to saturated zone	 1.00 0.75	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00
694D: Annalake-----	40	Very limited Frost action Slope Depth to saturated zone	 1.00 1.00 0.75	Very limited Depth to saturated zone Cutbanks cave Slope	 1.00 1.00 1.00 1.00
Stutts-----	35	Very limited Slope	 1.00	Very limited Cutbanks cave Slope	 1.00 1.00
Arnheim-----	25	Very limited Depth to saturated zone Frost action Flooding Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Flooding	 1.00 1.00 1.00 0.80
5170: Minocqua-----	50	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00
Pleine-----	30	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00
Cathro-----	15	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Organic matter content Cutbanks cave	 1.00 1.00 1.00 0.10

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
5171B: Tula-----	60	Very limited Depth to saturated zone Frost action Depth to thick cemented pan	 1.00 1.00 0.65	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 0.50
Wormet-----	15	Very limited Depth to saturated zone Frost action	 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00
Gogebic, sandy substratum-----	15	Very limited Depth to saturated zone Depth to thick cemented pan Frost action	 1.00 1.00 0.50	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 0.50
5172B: Gogebic, sandy substratum-----	60	Very limited Depth to saturated zone Depth to thick cemented pan Frost action	 1.00 1.00 0.50	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 0.50
Pence-----	15	Not limited		Very limited Cutbanks cave	1.00
Cathro-----	15	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Organic matter content Cutbanks cave	 1.00 1.00 1.00 0.10
5172C: Gogebic, sandy substratum-----	60	Very limited Depth to saturated zone Depth to thick cemented pan Slope Frost action	 1.00 1.00 0.63 0.50	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Slope Dense layer	 1.00 1.00 1.00 0.63 0.50
Pence-----	15	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63

Soil Survey of Gogebic County, Michigan

Table 12b.--Building Site Development--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Rating class and limiting features	Value	Rating class and limiting features	Value
5172C: Cathro-----	15	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Organic matter content Cutbanks cave	 1.00 1.00 1.00 0.10
5172D: Gogebic, sandy substratum-----	60	Very limited Depth to saturated zone Slope Depth to thick cemented pan Frost action	 1.00 1.00 1.00 0.50	Very limited Depth to thick cemented pan Slope Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 1.00 0.50
Pence-----	15	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00
Cathro-----	15	Very limited Depth to saturated zone Frost action Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Organic matter content Cutbanks cave	1.00 1.00 1.00 0.10
5173D: Gogebic, sandy substratum-----	60	Very limited Depth to saturated zone Slope Depth to thick cemented pan Frost action	1.00 1.00 1.00 0.50	Very limited Depth to thick cemented pan Slope Depth to saturated zone Cutbanks cave Dense layer	1.00 1.00 1.00 1.00 0.50
Pence-----	30	Very limited Slope	1.00	Very limited Slope Cutbanks cave	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
7: Histosols-----	60	Very limited Ponding Depth to saturated zone Subsidence Slow water movement Seepage, bottom layer	1.00 1.00 1.00 1.00 1.00 1.00	Very limited Ponding Organic matter content Depth to saturated zone Seepage	1.00 1.00 1.00 1.00
Aquents-----	40	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
10: Witbeck-----	90	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 0.46	Very limited Depth to saturated zone Content of large stones Ponding Organic matter content Seepage	1.00 1.00 1.00 1.00 1.00
12A: Monico-----	100	Very limited Depth to saturated zone Seepage, bottom layer	1.00 1.00	Very limited Seepage Depth to saturated zone	1.00 1.00
13B: Argonne-----	83	Very limited Depth to cemented pan Depth to saturated zone Seepage, bottom layer	1.00 1.00 1.00	Very limited Depth to cemented pan Seepage Depth to saturated zone Slope	1.00 1.00 1.00 0.08
13C: Argonne-----	83	Very limited Depth to cemented pan Depth to saturated zone Seepage, bottom layer Slope	1.00 1.00 1.00 0.63	Very limited Depth to cemented pan Seepage Depth to saturated zone Slope	1.00 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
13D: Argonne-----	86	Very limited Depth to cemented pan Depth to saturated zone Slope Seepage, bottom layer	1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Seepage Depth to saturated zone	1.00 1.00 1.00 1.00
15B: Wabeno-----	100	Very limited Depth to cemented pan Depth to saturated zone Seepage, bottom layer	1.00 1.00 1.00	Very limited Depth to cemented pan Seepage Depth to saturated zone Slope	1.00 1.00 0.44 0.08
15C: Wabeno-----	100	Very limited Depth to cemented pan Depth to saturated zone Seepage, bottom layer Slope	1.00 1.00 1.00 0.63	Very limited Depth to cemented pan Seepage Slope Depth to saturated zone	1.00 1.00 1.00 0.44
16A: Fence-----	100	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 0.53
17B: Lode-----	85	Very limited Seepage, bottom layer Slow water movement	1.00 0.46	Very limited Seepage Slope	1.00 0.08
17C: Lode-----	86	Very limited Seepage, bottom layer Slope Slow water movement	1.00 0.63 0.46	Very limited Seepage Slope	1.00 1.00
20B: Pence-----	62	Very limited Filtering capacity Seepage, bottom layer	1.00 1.00	Very limited Seepage Slope	1.00 0.08

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
20B: Lode-----	30	Very limited Seepage, bottom layer Slow water movement	1.00 0.46	Very limited Seepage Slope	1.00 0.08
20C: Pence-----	86	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 1.00
21: Minocqua-----	60	Very limited Depth to saturated zone Seepage, bottom layer Ponding Slow water movement	1.00 1.00 1.00 0.46	Very limited Seepage Depth to saturated zone Ponding Organic matter content	1.00 1.00 1.00 1.00
Leafriver-----	30	Very limited Depth to saturated zone Filtering capacity Seepage, bottom layer Ponding	1.00 1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Ponding	1.00 1.00 1.00
23B: Chabeneau-----	57	Very limited Depth to saturated zone Filtering capacity Seepage, bottom layer	1.00 1.00 1.00	Very limited Seepage Depth to saturated zone	1.00 1.00
Karlin-----	28	Very limited Filtering capacity Seepage, bottom layer	1.00 1.00	Very limited Seepage Slope	1.00 0.08
Pence-----	15	Very limited Filtering capacity Seepage, bottom layer	1.00 1.00	Very limited Seepage Slope	1.00 0.08

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
26B: Stambaugh-----	90	Very limited Seepage, bottom layer Slow water movement	1.00 0.46	Very limited Seepage Slope	1.00 0.08
27: Lupton-----	50	Very limited Depth to saturated zone Subsidence Seepage, bottom layer Ponding	1.00 1.00 1.00 1.00	Very limited Organic matter content Depth to saturated zone Seepage Ponding	1.00 1.00 1.00 1.00
Tawas-----	48	Very limited Depth to saturated zone Filtering capacity Seepage, bottom layer Ponding	1.00 1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Ponding Organic matter content	1.00 1.00 1.00 1.00
28: Dawson-----	40	Very limited Depth to saturated zone Seepage, bottom layer Ponding	1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Ponding Organic matter content	1.00 1.00 1.00 1.00
Greenwood-----	35	Very limited Depth to saturated zone Subsidence Seepage, bottom layer Ponding	1.00 1.00 1.00 1.00	Very limited Organic matter content Depth to saturated zone Seepage Ponding	1.00 1.00 1.00 1.00
Loxley-----	20	Very limited Depth to saturated zone Subsidence Seepage, bottom layer Ponding	1.00 1.00 1.00 1.00	Very limited Organic matter content Depth to saturated zone Seepage Ponding	1.00 1.00 1.00 1.00
29B: Pence, very deep water table-----	85	Very limited Filtering capacity Seepage, bottom layer	1.00 1.00	Very limited Seepage Slope	1.00 0.08

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
31:					
Evart-----	55	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Ponding	1.00
		Ponding	1.00	Organic matter content	1.00
Tawas-----	45	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Ponding	1.00
		Ponding	1.00	Organic matter content	1.00
32A:					
Net-----	100	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to cemented pan	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
35A:					
Beechwood-----	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Organic matter content	1.00
				Seepage	0.50
36:					
Gay-----	58	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Slow water movement	0.46	Organic matter content	1.00
				Seepage	0.53
Pleine-----	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Content of large stones	1.00
		Slow water movement	0.46	Ponding	1.00
		Content of large stones	0.01	Organic matter content	1.00
				Seepage	0.53

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
37B: Gogebic-----	51	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Seepage Slope	1.00 1.00 0.50 0.32
Tula-----	31	Very limited Depth to cemented pan Depth to saturated zone Slow water movement	1.00 1.00 0.46	Very limited Depth to cemented pan Depth to saturated zone Content of large stones Seepage	1.00 1.00 0.61 0.54
Lupton-----	15	Very limited Depth to saturated zone Subsidence Seepage, bottom layer Ponding	1.00 1.00 1.00 1.00	Very limited Organic matter content Depth to saturated zone Seepage Ponding	1.00 1.00 1.00 1.00
38B: Gogebic, sandy substratum-----	95	Very limited Depth to cemented pan Depth to saturated zone Seepage, bottom layer	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Seepage Slope	1.00 1.00 0.50 0.32
38C: Gogebic, sandy substratum-----	95	Very limited Depth to cemented pan Depth to saturated zone Seepage, bottom layer Slope	1.00 1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope Seepage	1.00 1.00 1.00 0.50
38D: Gogebic, sandy substratum-----	95	Very limited Depth to cemented pan Depth to saturated zone Slope Seepage, bottom layer	1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone Seepage	1.00 1.00 1.00 0.50

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
39B: Gogebic, sandy substratum-----	85	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to cemented pan	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Seepage	0.50
				Slope	0.32
39C: Gogebic, sandy substratum-----	85	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to cemented pan	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Slope	0.63	Seepage	0.50
39D: Gogebic, sandy substratum-----	85	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to cemented pan	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Seepage	0.50
41: Lupton-----	60	Very limited		Very limited	
		Depth to saturated zone	1.00	Organic matter content	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Ponding	1.00	Ponding	1.00
Pleine-----	23	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Slow water movement	0.46	Organic matter content	1.00
				Content of large stones	0.79
				Seepage	0.53
Cathro-----	15	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Seepage	1.00
		Ponding	1.00	Ponding	1.00
		Slow water movement	0.46	Organic matter content	1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
42: Ausable-----	70	Very limited Flooding Depth to saturated zone Filtering capacity Seepage, bottom layer	 1.00 1.00 1.00 1.00	Very limited Flooding Seepage Depth to saturated zone Organic matter content	 1.00 1.00 1.00 1.00
Tawas-----	25	Very limited Depth to saturated zone Filtering capacity Seepage, bottom layer Ponding	 1.00 1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Ponding Organic matter content	 1.00 1.00 1.00 1.00
43B: Karlin-----	55	Very limited Filtering capacity Seepage, bottom layer	 1.00 1.00	Very limited Seepage Slope	 1.00 0.32
Pence-----	40	Very limited Filtering capacity Seepage, bottom layer	 1.00 1.00	Very limited Seepage Slope	 1.00 0.32
43C: Karlin-----	55	Very limited Filtering capacity Seepage, bottom layer Slope	 1.00 1.00 0.63	Very limited Seepage Slope	 1.00 1.00
Pence-----	40	Very limited Filtering capacity Seepage, bottom layer Slope	 1.00 1.00 0.63	Very limited Seepage Slope	 1.00 1.00
43D: Karlin-----	55	Very limited Filtering capacity Slope Seepage, bottom layer	 1.00 1.00 1.00	Very limited Slope Seepage	 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
43D: Pence-----	40	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
44B: Karlin-----	36	Very limited Filtering capacity Seepage, bottom layer	1.00 1.00	Very limited Seepage Slope	1.00 0.68
Keweenaw-----	30	Somewhat limited Slow water movement	0.82	Somewhat limited Seepage Slope	0.98 0.08
Sarona, dense substratum-----	25	Somewhat limited Slow water movement	0.50	Very limited Seepage Slope	1.00 0.68
44C: Karlin-----	36	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 1.00	Very limited Seepage Slope	1.00 1.00
Keweenaw-----	30	Very limited Slope Slow water movement	1.00 0.82	Very limited Slope Seepage	1.00 0.98
Sarona, dense substratum-----	25	Somewhat limited Slow water movement Slope	0.50 0.16	Very limited Seepage Slope	1.00 1.00
44D: Karlin-----	36	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
Keweenaw-----	30	Very limited Slope Slow water movement	1.00 0.82	Very limited Slope Seepage	1.00 0.98

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
44D: Saronia, dense substratum-----	25	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 1.00
46C: Amasa-----	54	Very limited Seepage, bottom layer Slow water movement Slope	1.00 0.46 0.16	Very limited Seepage Slope	1.00 1.00
Karlin-----	40	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 0.16	Very limited Seepage Slope	1.00 1.00
46D: Amasa-----	52	Very limited Slope Seepage, bottom layer Slow water movement	1.00 1.00 0.46	Very limited Slope Seepage	1.00 1.00
Karlin-----	38	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
46E: Amasa-----	52	Very limited Slope Seepage, bottom layer Slow water movement	1.00 1.00 0.46	Very limited Slope Seepage	1.00 1.00
Karlin-----	38	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
46F: Amasa-----	53	Very limited Slope Seepage, bottom layer Slow water movement	1.00 1.00 0.46	Very limited Slope Seepage	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
46F: Karlin-----	37	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
47B: Karlin, very deep water table-----	41	Very limited Filtering capacity Seepage, bottom layer	1.00 1.00	Very limited Seepage Slope	1.00 0.08
Noseum-----	35	Very limited Depth to saturated zone Filtering capacity Seepage, bottom layer	1.00 1.00 1.00	Very limited Seepage Depth to saturated zone	1.00 1.00
Gay-----	16	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 0.46	Very limited Depth to saturated zone Ponding Organic matter content Seepage	1.00 1.00 1.00 0.53
48C: Karlin-----	75	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 1.00	Very limited Seepage Slope	1.00 1.00
Michigamme-----	20	Very limited Slow water movement Depth to bedrock Slope	1.00 1.00 0.16	Very limited Depth to hard bedrock Slope Seepage	1.00 1.00 0.53
48F: Karlin-----	55	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
Michigamme-----	30	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 0.46	Very limited Depth to hard bedrock Slope Seepage	1.00 1.00 0.53

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
49B:					
Pelissier-----	52	Very limited Filtering capacity Seepage, bottom layer	1.00 1.00	Very limited Seepage Slope	1.00 0.08
Sarwet-----	35	Very limited Depth to saturated zone Seepage, bottom layer	1.00 1.00	Very limited Depth to saturated zone Seepage Slope	1.00 1.00 0.08
49C:					
Pelissier-----	50	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 1.00	Very limited Seepage Slope	1.00 1.00
Sarwet-----	35	Very limited Depth to saturated zone Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 1.00
49D:					
Pelissier-----	85	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
52B:					
Pence-----	56	Very limited Filtering capacity Seepage, bottom layer	1.00 1.00	Very limited Seepage Slope	1.00 0.32
Vilas-----	35	Very limited Filtering capacity Seepage, bottom layer	1.00 1.00	Very limited Seepage Slope	1.00 0.08
52C:					
Pence-----	56	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
52C: Vilas-----	35	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 1.00
53B: Manitowish-----	77	Very limited Depth to saturated zone Seepage, bottom layer	1.00 1.00	Very limited Seepage Depth to saturated zone	1.00 1.00
Croswell-----	22	Very limited Depth to saturated zone Filtering capacity Seepage, bottom layer	1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Slope	1.00 1.00 0.08
57B: Karlin-----	70	Very limited Filtering capacity Seepage, bottom layer	1.00 1.00	Very limited Seepage Slope	1.00 0.32
Manitowish-----	20	Very limited Depth to saturated zone Seepage, bottom layer	1.00 1.00	Very limited Seepage Depth to saturated zone Slope	1.00 1.00 0.32
57C: Karlin-----	75	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 1.00
Manitowish-----	16	Very limited Depth to saturated zone Seepage, bottom layer Slope	1.00 1.00 0.63	Very limited Seepage Depth to saturated zone Slope	1.00 1.00 1.00
58B: Vilas, very deep water table-----	40	Very limited Filtering capacity Seepage, bottom layer	1.00 1.00	Very limited Seepage Slope	1.00 0.08

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
58B: Croswell-----	22	Very limited Depth to saturated zone Filtering capacity Seepage, bottom layer	 1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Slope	 1.00 1.00 0.08
Pence, very deep water table-----	20	Very limited Filtering capacity Seepage, bottom layer	 1.00 1.00	Very limited Seepage Slope	 1.00 0.08
61: Tawas-----	60	Very limited Depth to saturated zone Filtering capacity Seepage, bottom layer Ponding	 1.00 1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Ponding Organic matter content	 1.00 1.00 1.00 1.00
Kinross-----	30	Very limited Depth to saturated zone Filtering capacity Seepage, bottom layer Ponding	 1.00 1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Ponding Organic matter content	 1.00 1.00 1.00 1.00
62B: Pelkie-----	100	Very limited Flooding Depth to saturated zone Filtering capacity Seepage, bottom layer	 1.00 1.00 1.00 1.00	Very limited Flooding Seepage Depth to saturated zone Slope	 1.00 1.00 1.00 0.08
83: Bowstring-----	90	Very limited Flooding Depth to saturated zone Seepage, bottom layer Slow water movement Ponding	 1.00 1.00 1.00 1.00 1.00	Very limited Flooding Seepage Depth to saturated zone Ponding Organic matter content	 1.00 1.00 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
141D: Oldman-----	80	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to cemented pan	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Content of large stones	0.96	Seepage	1.00
		Slope	0.63	Depth to saturated zone	1.00
				Content of large stones	1.00
141E: Oldman-----	80	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to cemented pan	1.00
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Content of large stones	0.96	Depth to saturated zone	1.00
				Content of large stones	1.00
141F: Porkies-----	80	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Content of large stones	0.69
		Depth to cemented pan	0.78	Seepage	0.68
		Slow water movement	0.68	Depth to cemented pan	0.42
		Content of large stones	0.13		
214B: Amnicon-----	60	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slope	0.68
Bergland-----	30	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Organic matter content	1.00
216B: Amnicon-----	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slope	0.68

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
217A: Cuttre-----	85	Very limited Slow water movement Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone	1.00
218: Bergland-----	80	Very limited Slow water movement Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Organic matter content	1.00 1.00 1.00
219B: Payseor-----	50	Very limited Slow water movement Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 0.92
Froberg-----	40	Very limited Slow water movement Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Slope Seepage	1.00 0.08 0.02
222: Matchwood-----	85	Very limited Slow water movement Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
225A: Cuttre-----	50	Very limited Slow water movement Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone	1.00
Bergland-----	40	Very limited Slow water movement Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Organic matter content	1.00 1.00 1.00
226B: Froberg-----	85	Very limited Slow water movement Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Slope Seepage	1.00 0.08 0.02

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
230B: Moquah-----	55	Very limited Depth to saturated zone Flooding Slow water movement	1.00 0.40 0.32	Somewhat limited Depth to saturated zone Seepage Flooding	1.00 0.82 0.40
Arnheim-----	30	Very limited Flooding Depth to saturated zone Ponding Slow water movement	1.00 1.00 1.00 0.82	Very limited Flooding Depth to saturated zone Ponding Seepage	1.00 1.00 1.00 0.18
231: Matchwood-----	45	Very limited Slow water movement Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Dorval-----	35	Very limited Slow water movement Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding Organic matter content	1.00 1.00 1.00 1.00
233: Schaat Creek-----	90	Very limited Flooding Slow water movement Depth to saturated zone	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
239D: Miskoaki-----	85	Very limited Slow water movement Slope	1.00 1.00	Very limited Slope	1.00
277B: Kellogg, sandy substratum-----	50	Very limited Slow water movement Depth to saturated zone Seepage, bottom layer	1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Slope	1.00 1.00 0.08

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
277B: Allendale-----	35	Very limited Slow water movement Depth to saturated zone	1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Slope	1.00 1.00 0.08
280B: Flintsteel-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
280C: Flintsteel-----	85	Very limited Depth to saturated zone Slope	1.00 0.16	Very limited Slope Depth to saturated zone	1.00 1.00
282B: Big Iron-----	70	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone	1.00
Flintsteel-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
283B: Loggerhead-----	40	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 0.50
Noseum-----	30	Very limited Depth to saturated zone Filtering capacity Seepage, bottom layer	1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Slope	1.00 1.00 0.32
Ubly-----	20	Very limited Slow water movement	1.00	Very limited Seepage Slope	1.00 0.92
283C: Loggerhead-----	40	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 0.16	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.50

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
283C: Noseum-----	30	Very limited Depth to saturated zone Filtering capacity Seepage, bottom layer Slope	 1.00 1.00 1.00 0.01	Very limited Seepage Depth to saturated zone Slope	 1.00 1.00 1.00
Ubly-----	20	Very limited Slow water movement Slope	 1.00 0.01	Very limited Seepage Slope	 1.00 1.00
284: Aguents-----	55	Very limited Ponding Depth to saturated zone	 1.00 1.00	Very limited Ponding Depth to saturated zone	 1.00 1.00
Gull Point-----	40	Very limited Flooding Slow water movement Depth to saturated zone	 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Organic matter content Seepage	 1.00 1.00 1.00 0.32
285F: Rockland-----	70	Very limited Slope Slow water movement	 1.00 1.00	Very limited Slope	 1.00
Arnheim-----	15	Very limited Flooding Depth to saturated zone Ponding Slow water movement	 1.00 1.00 1.00 0.82	Very limited Flooding Depth to saturated zone Ponding Seepage	 1.00 1.00 1.00 0.18
286A: Big Iron-----	65	Very limited Depth to saturated zone Slow water movement	 1.00 1.00	Very limited Depth to saturated zone	 1.00
Belding-----	20	Very limited Depth to saturated zone Slow water movement	 1.00 1.00	Very limited Seepage Depth to saturated zone	 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
287: Trap Falls-----	55	Very limited Slow water movement Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Tonkey-----	35	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 0.46	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.53
289B: Amasa-----	95	Very limited Seepage, bottom layer Slow water movement	1.00 0.46	Very limited Seepage Slope	1.00 0.08
290B: Flintsteel-----	80	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
290C: Flintsteel-----	85	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Depth to saturated zone Slope	1.00 1.00
291B: Kalkaska-----	80	Very limited Filtering capacity Seepage, bottom layer	1.00 1.00	Very limited Seepage Slope	1.00 0.08
291D: Kalkaska-----	85	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 0.63	Very limited Slope Seepage	1.00 1.00
292B: Manido-----	45	Very limited Depth to saturated zone Filtering capacity Seepage, bottom layer	1.00 1.00 1.00	Very limited Seepage Depth to saturated zone	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
292B: Richter-----	40	Very limited Depth to saturated zone Slow water movement	1.00 0.50	Very limited Depth to saturated zone Seepage Slope	1.00 0.50 0.08
293A: Wainola-----	55	Very limited Depth to saturated zone Filtering capacity Seepage, bottom layer	1.00 1.00 1.00	Very limited Seepage Depth to saturated zone	1.00 1.00
Trap Falls-----	25	Very limited Slow water movement Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
296B: Manido-----	35	Very limited Depth to saturated zone Filtering capacity Seepage, bottom layer	1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Slope	1.00 1.00 0.08
Fence-----	30	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Seepage Slope	1.00 0.53 0.08
Gogebic, sandy substratum-----	20	Very limited Depth to cemented pan Depth to saturated zone Seepage, bottom layer	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Seepage Slope	1.00 1.00 0.50 0.08
296D: Manido-----	35	Very limited Depth to saturated zone Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00 1.00	Very limited Slope Seepage Depth to saturated zone	1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
296D: Sporley-----	30	Very limited Slope Slow water movement	1.00 1.00	Very limited Slope	1.00
Gogebic, sandy substratum-----	20	Very limited Depth to cemented pan Depth to saturated zone Slope Seepage, bottom layer	1.00 1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone Seepage	1.00 1.00 1.00 0.50
299B: Zandi-----	40	Somewhat limited Slow water movement	0.50	Somewhat limited Seepage Slope	0.50 0.32
Amasa-----	30	Very limited Seepage, bottom layer Slow water movement	1.00 0.46	Very limited Seepage Slope	1.00 0.08
Flintsteel-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
299C: Zandi-----	40	Somewhat limited Slope Slow water movement	0.63 0.50	Very limited Slope Seepage	1.00 0.50
Amasa-----	30	Very limited Seepage, bottom layer Slope Slow water movement	1.00 0.63 0.46	Very limited Seepage Slope	1.00 1.00
Flintsteel-----	20	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Depth to saturated zone Slope	1.00 1.00
301A: Moodig-----	86	Very limited Depth to saturated zone Slow water movement	1.00 0.46	Very limited Depth to saturated zone Seepage	1.00 0.53

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
302B: Manitowish-----	85	Very limited Depth to saturated zone Seepage, bottom layer	1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Slope	1.00 1.00 0.08
302C: Manitowish-----	85	Very limited Depth to saturated zone Seepage, bottom layer Slope	1.00 1.00 1.00 0.63	Very limited Seepage Depth to saturated zone Slope	1.00 1.00 1.00
303: Bowstring-----	50	Very limited Flooding Depth to saturated zone Seepage, bottom layer Ponding	1.00 1.00 1.00 1.00	Very limited Flooding Seepage Depth to saturated zone Ponding Organic matter content	1.00 1.00 1.00 1.00
Arnheim-----	40	Very limited Flooding Depth to saturated zone Ponding Slow water movement	1.00 1.00 1.00 0.82	Very limited Flooding Depth to saturated zone Ponding Seepage	1.00 1.00 1.00 0.18
305B: Keweenaw-----	45	Somewhat limited Slow water movement	0.82	Somewhat limited Seepage Slope	0.98 0.08
Siskiwit-----	40	Very limited Depth to saturated zone Seepage, bottom layer Slow water movement	1.00 1.00 1.00 0.50	Very limited Seepage Depth to saturated zone Slope	1.00 1.00 0.68
305C: Keweenaw-----	45	Somewhat limited Slow water movement Slope	0.82 0.16	Very limited Slope Seepage	1.00 0.98
Siskiwit-----	40	Very limited Depth to saturated zone Seepage, bottom layer Slow water movement	1.00 1.00 1.00 0.50	Very limited Seepage Depth to saturated zone Slope	1.00 1.00 0.92

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
307: Lupton-----	45	Very limited Depth to saturated zone Subsidence Seepage, bottom layer Ponding	 1.00 1.00 1.00 1.00	Very limited Organic matter content Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00 1.00
Cathro-----	45	Very limited Depth to saturated zone Subsidence Ponding Slow water movement	 1.00 1.00 1.00 0.46	Very limited Depth to saturated zone Seepage Ponding Organic matter content	 1.00 1.00 1.00 1.00
309: Cathro-----	85	Very limited Depth to saturated zone Subsidence Ponding Slow water movement	 1.00 1.00 1.00 0.46	Very limited Depth to saturated zone Seepage Ponding Organic matter content	 1.00 1.00 1.00 1.00
310B: Gogebic-----	92	Very limited Depth to cemented pan Depth to saturated zone	 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Seepage Slope	 1.00 1.00 0.50 0.32
310C: Gogebic-----	92	Very limited Depth to cemented pan Depth to saturated zone Slope	 1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope Seepage	 1.00 1.00 1.00 0.50
310D: Gogebic-----	92	Very limited Depth to cemented pan Depth to saturated zone Slope	 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone Seepage	 1.00 1.00 1.00 0.50

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
310E: Schweitzer-----	90	Very limited Depth to cemented pan Slope Content of large stones	1.00 1.00 0.32	Very limited Depth to cemented pan Slope Content of large stones Seepage	1.00 1.00 1.00 0.56
311B: Tula-----	45	Very limited Depth to cemented pan Depth to saturated zone Slow water movement	1.00 1.00 0.46	Very limited Depth to cemented pan Depth to saturated zone Content of large stones Seepage	1.00 1.00 0.61 0.54
Gogebic-----	40	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Seepage Slope	1.00 1.00 0.50 0.32
312A: Tula-----	35	Very limited Depth to cemented pan Depth to saturated zone Slow water movement	1.00 1.00 0.46	Very limited Depth to cemented pan Depth to saturated zone Content of large stones Seepage	1.00 1.00 0.61 0.54
Foxpaw-----	30	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 0.50	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.50
Gay-----	25	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 0.46	Very limited Depth to saturated zone Ponding Organic matter content Seepage	1.00 1.00 1.00 0.53
316: Gay-----	85	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 0.46	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.53

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
317B: Gogebic-----	95	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Seepage Slope	1.00 1.00 0.50 0.32
317C: Gogebic-----	90	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope Seepage	1.00 1.00 1.00 0.50
317D: Gogebic-----	88	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone Seepage	1.00 1.00 1.00 0.50
319B: McMillan-----	45	Very limited Filtering capacity Seepage, bottom layer	1.00 1.00	Very limited Seepage Slope	1.00 0.08
Noseum-----	40	Very limited Depth to saturated zone Filtering capacity Seepage, bottom layer	1.00 1.00 1.00	Very limited Seepage Depth to saturated zone	1.00 1.00
319C: McMillan-----	45	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 1.00
Islandlake-----	40	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
319D: McMillan-----	45	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
Islandlake-----	40	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
319E: McMillan-----	45	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
Islandlake-----	40	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
322B: Stutts-----	60	Very limited Filtering capacity Seepage, bottom layer	1.00 1.00	Very limited Seepage Slope	1.00 0.08
Keweenaw-----	30	Somewhat limited Slow water movement	0.82	Somewhat limited Seepage Slope	0.98 0.08
322C: Stutts-----	60	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 1.00
Keweenaw-----	30	Somewhat limited Slow water movement Slope	0.82 0.63	Very limited Slope Seepage	1.00 0.98

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
322D: Stutts-----	60	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
Keweenaw-----	30	Very limited Slope Slow water movement	1.00 0.82	Very limited Slope Seepage	1.00 0.98
323B: Keweenaw-----	50	Somewhat limited Slow water movement	0.82	Somewhat limited Seepage Slope	0.98 0.08
Kalkaska-----	40	Very limited Filtering capacity Seepage, bottom layer	1.00 1.00	Very limited Seepage Slope	1.00 0.08
323C: Keweenaw-----	50	Somewhat limited Slow water movement Slope	0.82 0.63	Very limited Slope Seepage	1.00 0.98
Kalkaska-----	40	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 1.00
323D: Keweenaw-----	50	Very limited Slope Slow water movement	1.00 0.82	Very limited Slope Seepage	1.00 0.98
Kalkaska-----	40	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
325B: Siskiwit-----	55	Very limited Depth to saturated zone Seepage, bottom layer Slow water movement	1.00 1.00 0.50	Very limited Seepage Depth to saturated zone Slope	1.00 1.00 0.68

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
325B: Gogebic-----	45	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Seepage Slope	1.00 1.00 0.50 0.08
325C: Siskiwit-----	55	Very limited Depth to saturated zone Seepage, bottom layer Slow water movement	1.00 1.00 0.50	Very limited Seepage Depth to saturated zone Slope	1.00 1.00 0.92
Gogebic-----	45	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.04	Very limited Depth to cemented pan Depth to saturated zone Slope Seepage	1.00 1.00 1.00 0.50
327: Foxpaw-----	60	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 0.50	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.50
Sarwet-----	40	Very limited Depth to saturated zone Seepage, bottom layer	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00
328B: Annalake-----	50	Very limited Depth to saturated zone Slow water movement	1.00 0.68	Very limited Depth to saturated zone Seepage Slope	1.00 0.68 0.08
Karlin-----	36	Very limited Filtering capacity Seepage, bottom layer	1.00 1.00	Very limited Seepage Slope	1.00 0.32

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
328C: Annalake-----	50	Very limited Depth to saturated zone Slow water movement Slope	 1.00 0.68 0.63	Very limited Depth to saturated zone Slope Seepage	 1.00 1.00 0.68
Karlin-----	40	Very limited Filtering capacity Seepage, bottom layer Slope	 1.00 1.00 0.63	Very limited Seepage Slope	 1.00 1.00
328D: Karlin-----	50	Very limited Filtering capacity Slope Seepage, bottom layer	 1.00 1.00 1.00	Very limited Slope Seepage	 1.00 1.00
Zandi-----	45	Very limited Slope Slow water movement	 1.00 0.50	Very limited Slope Seepage	 1.00 0.50
329A: Tula-----	90	Very limited Depth to cemented pan Depth to saturated zone Slow water movement	 1.00 1.00 0.46	Very limited Depth to cemented pan Depth to saturated zone Seepage Content of large stones	 1.00 1.00 0.54 0.10
351B: Gogebic-----	85	Very limited Depth to cemented pan Depth to saturated zone	 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Seepage Slope	 1.00 1.00 0.50 0.32
351C: Gogebic-----	85	Very limited Depth to cemented pan Depth to saturated zone Slope	 1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope Seepage	 1.00 1.00 1.00 0.50

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
351D: Gogebic-----	85	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone Seepage	1.00 1.00 1.00 0.50
351E: Schweitzer-----	85	Very limited Depth to cemented pan Slope Content of large stones	1.00 1.00 0.22	Very limited Depth to cemented pan Slope Content of large stones Seepage	1.00 1.00 0.97 0.50
351F: Schweitzer-----	90	Very limited Depth to cemented pan Slope Content of large stones	1.00 1.00 0.22	Very limited Depth to cemented pan Slope Content of large stones Seepage	1.00 1.00 0.97 0.50
353A: Tula-----	85	Very limited Depth to cemented pan Depth to saturated zone Slow water movement	1.00 1.00 0.46	Very limited Depth to cemented pan Depth to saturated zone Seepage Content of large stones	1.00 1.00 0.54 0.10
354B: Gogebic-----	90	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Seepage Slope	1.00 1.00 0.50 0.32
354C: Gogebic-----	90	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope Seepage	1.00 1.00 1.00 0.50

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
354D: Gogebic-----	85	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone Seepage	1.00 1.00 1.00 0.50
354E: Schweitzer-----	85	Very limited Depth to cemented pan Slope Content of large stones	1.00 1.00 0.32	Very limited Depth to cemented pan Slope Content of large stones Seepage	1.00 1.00 1.00 0.56
354F: Schweitzer-----	90	Very limited Depth to cemented pan Slope Content of large stones	1.00 1.00 0.32	Very limited Depth to cemented pan Slope Content of large stones Seepage	1.00 1.00 1.00 0.56
363C: Talus-----	50	Not rated		Not rated	
Arcadian-----	35	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to hard bedrock Slope	1.00 1.00
363D: Talus-----	46	Not rated		Not rated	
Arcadian-----	35	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
363E: Talus-----	50	Not rated		Not rated	
Arcadian-----	35	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
363F: Talus-----	50	Not rated		Not rated	
Arcadian-----	35	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
364F: Talus-----	91	Not rated		Not rated	
365F: Rock outcrop-----	90	Not rated		Not rated	
369C: Dishno-----	35	Very limited		Very limited	
		Depth to	1.00	Seepage	1.00
		saturated zone		Depth to	1.00
		Seepage, bottom	1.00	saturated zone	
		layer		Slope	1.00
		Depth to bedrock	0.91	Depth to hard	0.77
		Slope	0.63	bedrock	
		Content of large	0.08	Content of large	0.06
		stones		stones	
Gogebic-----	30	Very limited		Very limited	
		Depth to cemented	1.00	Depth to cemented	1.00
		pan		pan	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Slope	0.63	Slope	1.00
				Seepage	0.50
Peshekee-----	15	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard	1.00
		Slope	0.63	bedrock	
		Content of large	0.02	Slope	1.00
		stones		Seepage	0.68
				Content of large	0.35
				stones	
Rock outcrop-----	15	Not rated		Not rated	
369D: Dishno-----	35	Very limited		Very limited	
		Depth to	1.00	Slope	1.00
		saturated zone		Seepage	1.00
		Slope	1.00	Depth to	1.00
		Seepage, bottom	1.00	saturated zone	
		layer		Depth to hard	0.77
		Depth to bedrock	0.91	bedrock	
		Content of large	0.08	Content of large	0.06
		stones		stones	
Gogebic-----	30	Very limited		Very limited	
		Depth to cemented	1.00	Depth to cemented	1.00
		pan		pan	
		Depth to	1.00	Slope	1.00
		saturated zone		Depth to	1.00
		Slope	1.00	saturated zone	
				Seepage	0.50

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
369D: Peshekee-----	15	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard	1.00
		Slope	1.00	bedrock	
		Content of large	0.02	Slope	1.00
		stones		Seepage	0.68
				Content of large	0.35
		stones			
Rock outcrop-----	15	Not rated		Not rated	
369E: Michigamme-----	30	Very limited		Very limited	
		Slow water	1.00	Depth to hard	1.00
		movement		bedrock	
		Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Seepage	0.53
Schweitzer-----	25	Very limited		Very limited	
		Depth to cemented	1.00	Depth to cemented	1.00
		pan		pan	
		Slope	1.00	Slope	1.00
		Content of large	0.32	Content of large	1.00
		stones		stones	
				Seepage	0.56
Peshekee-----	20	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard	1.00
		Slope	1.00	bedrock	
		Content of large	0.02	Slope	1.00
		stones		Seepage	0.68
				Content of large	0.35
				stones	
Rock outcrop-----	15	Not rated		Not rated	
369F: Michigamme-----	30	Very limited		Very limited	
		Slow water	1.00	Depth to hard	1.00
		movement		bedrock	
		Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Seepage	0.53
Schweitzer-----	25	Very limited		Very limited	
		Depth to cemented	1.00	Depth to cemented	1.00
		pan		pan	
		Slope	1.00	Slope	1.00
		Content of large	0.32	Content of large	1.00
		stones		stones	
				Seepage	0.56
Peshekee-----	20	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard	1.00
		Slope	1.00	bedrock	
		Content of large	0.02	Slope	1.00
		stones		Seepage	0.68
				Content of large	0.35
				stones	
Rock outcrop-----	15	Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
370E: Peshekee-----	55	Very limited Depth to bedrock Slope Content of large stones	 1.00 1.00 0.02	Very limited Depth to hard bedrock Slope Seepage Content of large stones	 1.00 1.00 0.68 0.35
Rock outcrop-----	40	Not rated		Not rated	
370F: Peshekee-----	55	Very limited Depth to bedrock Slope Content of large stones	 1.00 1.00 0.02	Very limited Depth to hard bedrock Slope Seepage Content of large stones	 1.00 1.00 0.68 0.35
Rock outcrop-----	40	Not rated		Not rated	
375: Dumps and Pits, mine	95	Not rated		Not rated	
380: Beseman-----	55	Very limited Depth to saturated zone Slow water movement Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding Organic matter content	 1.00 1.00 1.00 1.00
Greenwood-----	40	Very limited Depth to saturated zone Subsidence Seepage, bottom layer Ponding	 1.00 1.00 1.00 1.00	Very limited Organic matter content Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00 1.00
382: Cathro-----	45	Very limited Depth to saturated zone Subsidence Ponding Slow water movement	 1.00 1.00 1.00 0.46	Very limited Depth to saturated zone Seepage Ponding Organic matter content	 1.00 1.00 1.00 1.00
Arnheim-----	44	Very limited Flooding Depth to saturated zone Ponding Slow water movement	 1.00 1.00 1.00 0.82	Very limited Flooding Depth to saturated zone Ponding Seepage	 1.00 1.00 1.00 0.18

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
388: Gay-----	50	Very limited Depth to saturated zone Ponding Slow water movement	 1.00 1.00 0.46	Very limited Depth to saturated zone Ponding Organic matter content Seepage	 1.00 1.00 1.00 0.53
Tula-----	40	Very limited Depth to cemented pan Depth to saturated zone Slow water movement	 1.00 1.00 0.46	Very limited Depth to cemented pan Depth to saturated zone Content of large stones Seepage	 1.00 1.00 0.61 0.54
398B: Tula-----	50	Very limited Depth to cemented pan Depth to saturated zone Slow water movement	 1.00 1.00 0.46	Very limited Depth to cemented pan Depth to saturated zone Content of large stones Seepage	 1.00 1.00 0.61 0.54
Gay-----	30	Very limited Depth to saturated zone Ponding Slow water movement	 1.00 1.00 0.46	Very limited Depth to saturated zone Ponding Organic matter content Seepage	 1.00 1.00 1.00 0.53
Wakefield-----	15	Very limited Depth to cemented pan Depth to saturated zone	 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Seepage Slope	 1.00 1.00 0.50 0.08
418: Loxley-----	45	Very limited Depth to saturated zone Subsidence Seepage, bottom layer Ponding	 1.00 1.00 1.00 1.00	Very limited Organic matter content Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00 1.00
Beseman-----	41	Very limited Depth to saturated zone Slow water movement Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding Organic matter content	 1.00 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
419: Pleine-----	45	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 0.46	Very limited Depth to saturated zone Ponding Organic matter content Content of large stones Seepage	1.00 1.00 1.00 0.79 0.53
Cathro-----	30	Very limited Depth to saturated zone Subsidence Ponding Slow water movement	1.00 1.00 1.00 0.46	Very limited Depth to saturated zone Seepage Ponding Organic matter content	1.00 1.00 1.00 1.00
Gay-----	25	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 0.46	Very limited Depth to saturated zone Ponding Organic matter content Seepage	1.00 1.00 1.00 0.53
424: Gay-----	85	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 0.46	Very limited Depth to saturated zone Ponding Organic matter content Seepage	1.00 1.00 1.00 0.53
425: Foxpaw-----	45	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 0.50	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.50
Gay-----	40	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 0.46	Very limited Depth to saturated zone Ponding Organic matter content Seepage	1.00 1.00 1.00 0.53
428C: Gogebic-----	70	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope Seepage	1.00 1.00 1.00 0.50

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
428C: Michigamme-----	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard	1.00
		Slope	0.63	bedrock	
		Slow water	0.46	Slope	1.00
		movement		Seepage	0.53
428D: Gogebic-----	70	Very limited		Very limited	
		Depth to cemented	1.00	Depth to cemented	1.00
		pan		pan	
		Depth to	1.00	Slope	1.00
		saturated zone		Depth to	1.00
		Slope	1.00	saturated zone	
				Seepage	0.50
Michigamme-----	25	Very limited		Very limited	
		Slope	1.00	Depth to hard	1.00
		Depth to bedrock	1.00	bedrock	
		Slow water	0.46	Slope	1.00
		movement		Seepage	0.53
429B: Gogebic-----	79	Very limited		Very limited	
		Depth to cemented	1.00	Depth to cemented	1.00
		pan		pan	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
				Seepage	0.50
				Slope	0.08
Peshekee-----	15	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard	1.00
		Content of large	0.02	bedrock	
		stones		Seepage	0.68
				Content of large	0.35
				stones	
				Slope	0.08
429C: Gogebic-----	79	Very limited		Very limited	
		Depth to cemented	1.00	Depth to cemented	1.00
		pan		pan	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Slope	0.63	Slope	1.00
				Seepage	0.50
Peshekee-----	15	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard	1.00
		Slope	0.63	bedrock	
		Content of large	0.02	Slope	1.00
		stones		Seepage	0.68
				Content of large	0.35
				stones	

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
429D: Gogebic-----	75	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone Seepage	1.00 1.00 1.00 0.50
Peshekee-----	15	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.02	Very limited Depth to hard bedrock Slope Seepage Content of large stones	1.00 1.00 0.68 0.35
429E: Schweitzer-----	60	Very limited Depth to cemented pan Slope Content of large stones	1.00 1.00 0.32	Very limited Depth to cemented pan Slope Content of large stones Seepage	1.00 1.00 1.00 0.56
Peshekee-----	35	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.02	Very limited Depth to hard bedrock Slope Seepage Content of large stones	1.00 1.00 0.68 0.35
430B: Stutts-----	90	Very limited Seepage, bottom layer	1.00	Very limited Seepage Slope	1.00 0.08
430C: Stutts-----	90	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 1.00
430D: Stutts-----	90	Very limited Slope Seepage, bottom layer	1.00 1.00	Very limited Slope Seepage	1.00 1.00
430E: Stutts-----	90	Very limited Slope Seepage, bottom layer	1.00 1.00	Very limited Slope Seepage	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
432C: Gogebic-----	68	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope Seepage	1.00 1.00 1.00 0.50
Michigamme-----	15	Very limited Slow water movement Depth to bedrock Slope	1.00 1.00 0.63	Very limited Depth to hard bedrock Slope Seepage	1.00 1.00 0.53
Rock outcrop-----	15	Not rated		Not rated	
432D: Gogebic-----	68	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Slope Seepage	1.00 1.00 1.00 0.50
Michigamme-----	15	Very limited Seepage, bottom layer Depth to bedrock Slope Slow water movement	1.00 1.00 1.00 0.46	Very limited Depth to hard bedrock Seepage Slope	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
432E: Schweitzer-----	45	Very limited Depth to cemented pan Slope Content of large stones	1.00 1.00 0.32	Very limited Depth to cemented pan Slope Content of large stones Seepage	1.00 1.00 1.00 0.56
Michigamme-----	20	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 0.46	Very limited Depth to hard bedrock Slope Seepage	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
432F: Schweitzer-----	45	Very limited Depth to cemented pan Slope Content of large stones	1.00 1.00 0.32	Very limited Depth to cemented pan Slope Content of large stones Seepage	1.00 1.00 1.00 0.50
Michigamme-----	20	Very limited Slope Depth to bedrock Slow water movement	1.00 1.00 0.46	Very limited Depth to hard bedrock Slope Seepage	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	
433B: McMillan-----	85	Very limited Filtering capacity Seepage, bottom layer	1.00 1.00	Very limited Seepage Slope	1.00 0.08
433C: McMillan-----	85	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 1.00
433D: McMillan-----	85	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
435C: Kalkaska-----	45	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 0.16	Very limited Seepage Slope	1.00 1.00
Waiska-----	40	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 0.16	Very limited Seepage Slope	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
435D: Kalkaska-----	45	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
Waiska-----	40	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
435E: Kalkaska-----	45	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
Waiska-----	40	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
437B: Manitowish-----	65	Very limited Depth to saturated zone Seepage, bottom layer	1.00 1.00	Very limited Seepage Depth to saturated zone	1.00 1.00
Channing-----	20	Very limited Depth to saturated zone Seepage, bottom layer Slow water movement	1.00 1.00 1.00 0.50	Very limited Seepage Depth to saturated zone	1.00 1.00
448F: Rockland-----	75	Very limited Slope Slow water movement	1.00 1.00	Very limited Slope	1.00
Rock outcrop-----	25	Not rated		Not rated	
449C: Flintsteel-----	70	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Depth to saturated zone Slope	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
449C: Minocqua-----	30	Very limited Depth to saturated zone Seepage, bottom layer Ponding Slow water movement	 1.00 1.00 1.00 0.46	Very limited Seepage Depth to saturated zone Ponding Organic matter content	 1.00 1.00 1.00 1.00
452F: Rockland-----	90	Very limited Slope Slow water movement	 1.00 1.00	Very limited Slope	 1.00
460B: Belding-----	55	Very limited Slow water movement Depth to saturated zone	 1.00 1.00	Very limited Seepage Depth to saturated zone	 1.00 1.00
Manido-----	25	Very limited Depth to saturated zone Filtering capacity Seepage, bottom layer	 1.00 1.00 1.00	Very limited Seepage Depth to saturated zone Slope	 1.00 1.00 0.08
461B: Loggerhead-----	85	Very limited Depth to saturated zone Slow water movement	 1.00 1.00	Very limited Depth to saturated zone Seepage	 1.00 0.50
462C: Nonesuch-----	75	Very limited Depth to bedrock Depth to cemented pan Depth to saturated zone Slope	 1.00 1.00 1.00 0.04	Very limited Depth to soft bedrock Depth to cemented pan Depth to saturated zone Slope Depth to hard bedrock	 1.00 1.00 1.00 1.00 0.42
Rock outcrop-----	15	Not rated		Not rated	
509: Cathro-----	45	Very limited Depth to saturated zone Subsidence Ponding Slow water movement	 1.00 1.00 1.00 0.46	Very limited Depth to saturated zone Seepage Ponding Organic matter content	 1.00 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
509: Minocqua-----	40	Very limited		Very limited	
		Depth to	1.00	Seepage	1.00
		saturated zone		Depth to	1.00
		Seepage, bottom	1.00	saturated zone	
		layer		Ponding	1.00
		Ponding	1.00	Organic matter	1.00
		Slow water	0.46	content	
		movement			
511A: Gogebic-----	40	Very limited		Very limited	
		Depth to cemented	1.00	Depth to cemented	1.00
		pan		pan	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
				Seepage	0.50
				Slope	0.32
Tula-----	30	Very limited		Very limited	
		Depth to cemented	1.00	Depth to cemented	1.00
		pan		pan	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Slow water	0.46	Content of large	0.61
		movement		stones	
				Seepage	0.54
Chabeneau-----	15	Very limited		Very limited	
		Depth to	1.00	Seepage	1.00
		saturated zone		Depth to	1.00
		Filtering	1.00	saturated zone	
		capacity			
		Seepage, bottom	1.00		
		layer			
519B: Gogebic-----	50	Very limited		Very limited	
		Depth to cemented	1.00	Depth to cemented	1.00
		pan		pan	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
				Seepage	0.50
				Slope	0.08
Karlin-----	40	Very limited		Very limited	
		Filtering	1.00	Seepage	1.00
		capacity		Slope	0.08
		Seepage, bottom	1.00		
		layer			
519C: Gogebic-----	50	Very limited		Very limited	
		Depth to cemented	1.00	Depth to cemented	1.00
		pan		pan	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Slope	0.63	Slope	1.00
				Seepage	0.50

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
519C: Karlin-----	40	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 1.00
519D: Gogebic-----	50	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone Seepage	1.00 1.00 1.00 0.50
Karlin-----	40	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
522: Pits, sand and gravel-----	100	Not rated		Not rated	
523D: Gogebic, sandy substratum-----	53	Very limited Depth to cemented pan Depth to saturated zone Seepage, bottom layer Slope	1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Slope Seepage	1.00 1.00 1.00 0.50
Karlin-----	40	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 1.00	Very limited Seepage Slope	1.00 1.00
524C: Waiska-----	45	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 1.00
Amasa-----	40	Very limited Seepage, bottom layer Slope Slow water movement	1.00 0.63 0.46	Very limited Seepage Slope	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
524D: Waiska-----	45	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
Amasa-----	40	Very limited Slope Seepage, bottom layer Slow water movement	1.00 1.00 0.46	Very limited Slope Seepage	1.00 1.00
524E: Waiska-----	45	Very limited Filtering capacity Slope Seepage, bottom layer	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00
Amasa-----	40	Very limited Slope Seepage, bottom layer Slow water movement	1.00 1.00 0.46	Very limited Slope Seepage	1.00 1.00
527B: Wakefield-----	85	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Seepage Slope	1.00 1.00 0.53 0.08
527C: Wakefield-----	85	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope Seepage	1.00 1.00 1.00 0.53
527D: Wakefield-----	85	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone Seepage	1.00 1.00 1.00 0.53

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
528B: Gogebic-----	48	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Seepage Slope	1.00 1.00 0.50 0.08
Annalake-----	45	Very limited Depth to saturated zone Slow water movement	1.00 0.68	Very limited Depth to saturated zone Seepage Slope	1.00 0.68 0.08
528C: Gogebic-----	48	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope Seepage	1.00 1.00 1.00 0.50
Annalake-----	45	Very limited Depth to saturated zone Slow water movement Slope	1.00 0.68 0.63	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.68
528D: Gogebic-----	48	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone Seepage	1.00 1.00 1.00 0.50
Annalake-----	45	Very limited Depth to saturated zone Slope Slow water movement	1.00 1.00 0.68	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 0.68
551B: Gogebic-----	65	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Seepage Slope	1.00 1.00 0.50 0.32

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
551B: Dishno-----	30	Very limited Depth to saturated zone Seepage, bottom layer Depth to bedrock Content of large stones	 1.00 1.00 0.99 0.08	Very limited Seepage Depth to saturated zone Depth to hard bedrock Slope Content of large stones	 1.00 1.00 0.96 0.08 0.06
566: Beach, rubbly-----	95	Not rated		Not rated	
576B: Flintsteel-----	45	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone	 1.00
Loggerhead-----	40	Very limited Depth to saturated zone Slow water movement	 1.00 1.00	Very limited Depth to saturated zone Seepage	 1.00 0.50
576C: Flintsteel-----	45	Very limited Depth to saturated zone Slope	 1.00 0.16	Very limited Depth to saturated zone Slope	 1.00 1.00
Loggerhead-----	40	Very limited Depth to saturated zone Slow water movement Slope	 1.00 1.00 0.16	Very limited Depth to saturated zone Slope Seepage	 1.00 1.00 0.50
576D: Flintsteel-----	45	Very limited Depth to saturated zone Slope	 1.00 1.00	Very limited Slope Depth to saturated zone	 1.00 1.00
Loggerhead-----	40	Very limited Depth to saturated zone Slope Slow water movement	 1.00 1.00 1.00	Very limited Slope Depth to saturated zone Seepage	 1.00 1.00 0.50
577B: Loggerhead-----	35	Very limited Depth to saturated zone Slow water movement	 1.00 1.00	Very limited Depth to saturated zone Seepage	 1.00 0.50

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
577B: Chabeneau-----	30	Very limited		Very limited	
		Depth to	1.00	Seepage	1.00
		saturated zone		Depth to	1.00
		Filtering	1.00	saturated zone	
		capacity		Slope	0.32
		Seepage, bottom	1.00		
		layer			
Arcadian-----	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard	1.00
				bedrock	
				Slope	0.08
577C: Loggerhead-----	35	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Slow water	1.00	Slope	1.00
		movement		Seepage	0.50
		Slope	0.16		
Chabeneau-----	30	Very limited		Very limited	
		Depth to	1.00	Seepage	1.00
		saturated zone		Depth to	1.00
		Filtering	1.00	saturated zone	
		capacity		Slope	0.92
		Seepage, bottom	1.00		
		layer			
Arcadian-----	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard	1.00
		Slope	0.63	bedrock	
				Slope	1.00
577D: Loggerhead-----	35	Very limited		Very limited	
		Depth to	1.00	Slope	1.00
		saturated zone		Depth to	1.00
		Slope	1.00	saturated zone	
		Slow water	1.00	Seepage	0.50
		movement			
Chabeneau-----	30	Very limited		Very limited	
		Depth to	1.00	Seepage	1.00
		saturated zone		Depth to	1.00
		Filtering	1.00	saturated zone	
		capacity		Slope	1.00
		Seepage, bottom	1.00		
		layer			
		Slope	1.00		
Arcadian-----	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard	1.00
		Slope	1.00	bedrock	
				Slope	1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
578D: Arcadian-----	59	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Keweenaw-----	40	Very limited Slope Slow water movement	1.00 0.82	Very limited Slope Seepage	1.00 0.98
625B: Fence-----	95	Very limited Depth to saturated zone Slow water movement	1.00 1.00	Very limited Depth to saturated zone Seepage Slope	1.00 0.53 0.08
625C: Fence-----	98	Very limited Depth to saturated zone Slow water movement Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.53
626D: Sporley-----	85	Very limited Slope Slow water movement	1.00 1.00	Very limited Slope	1.00
626E: Sporley-----	90	Very limited Slope Slow water movement	1.00 1.00	Very limited Slope	1.00
648B: Annalake-----	93	Very limited Depth to saturated zone Slow water movement	1.00 0.68	Very limited Depth to saturated zone Seepage Slope	1.00 0.68 0.08
648C: Annalake-----	93	Very limited Depth to saturated zone Slow water movement Slope	1.00 0.68 0.63	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 0.68

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
650: Leafriver-----	90	Very limited		Very limited	
		Depth to	1.00	Seepage	1.00
		saturated zone		Depth to	1.00
		Filtering	1.00	saturated zone	
		capacity		Ponding	1.00
		Seepage, bottom	1.00		
		layer			
		Ponding	1.00		
652B: Manido-----	52	Very limited		Very limited	
		Depth to	1.00	Seepage	1.00
		saturated zone		Depth to	1.00
		Filtering	1.00	saturated zone	
		capacity		Slope	0.08
		Seepage, bottom	1.00		
		layer			
Annalake-----	24	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Slow water	0.68	Seepage	0.68
		movement		Slope	0.08
656B: Stutts-----	60	Very limited		Very limited	
		Seepage, bottom	1.00	Seepage	1.00
		layer		Slope	0.08
Zandi-----	30	Somewhat limited		Somewhat limited	
		Slow water	0.50	Seepage	0.50
		movement		Slope	0.08
656C: Stutts-----	60	Very limited		Very limited	
		Seepage, bottom	1.00	Seepage	1.00
		layer		Slope	1.00
		Slope	0.63		
Zandi-----	30	Somewhat limited		Very limited	
		Slope	0.63	Slope	1.00
		Slow water	0.50	Seepage	0.50
		movement			
656D: Stutts-----	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom	1.00	Seepage	1.00
		layer			
Zandi-----	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water	0.50	Seepage	0.50
		movement			

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
680B: Tonkey-----	37	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 0.46	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.53
Pleine-----	32	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 0.46	Very limited Depth to saturated zone Ponding Organic matter content Content of large stones Seepage	1.00 1.00 1.00 0.79 0.53
Annalake-----	20	Very limited Depth to saturated zone Slow water movement	1.00 0.68	Very limited Depth to saturated zone Seepage	1.00 0.68
681: Cathro-----	45	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 0.46	Very limited Depth to saturated zone Seepage Ponding Organic matter content	1.00 1.00 1.00 1.00
Tonkey-----	37	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 0.46	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.53
683B: Amasa-----	45	Very limited Seepage, bottom layer Slow water movement	1.00 0.46	Very limited Seepage Slope	1.00 0.08
Oldman-----	40	Very limited Depth to cemented pan Depth to saturated zone Content of large stones	1.00 1.00 0.96	Very limited Depth to cemented pan Seepage Depth to saturated zone Content of large stones Organic matter content	1.00 1.00 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
683C: Amasa-----	45	Very limited Seepage, bottom layer Slope Slow water movement	1.00 0.63 0.46	Very limited Seepage Slope	1.00 1.00
Oldman-----	40	Very limited Depth to cemented pan Depth to saturated zone Content of large stones Slope	1.00 1.00 0.96 0.63	Very limited Depth to cemented pan Seepage Depth to saturated zone Slope Content of large stones	1.00 1.00 1.00 1.00 1.00
683D: Amasa-----	45	Very limited Slope Seepage, bottom layer Slow water movement	1.00 1.00 0.46	Very limited Slope Seepage	1.00 1.00
Oldman-----	40	Very limited Depth to cemented pan Depth to saturated zone Slope Content of large stones	1.00 1.00 1.00 0.96	Very limited Depth to cemented pan Slope Seepage Depth to saturated zone Content of large stones	1.00 1.00 1.00 1.00 1.00
684B: Amasa-----	70	Very limited Seepage, bottom layer Slow water movement	1.00 0.46	Very limited Seepage Slope	1.00 0.32
684C: Amasa-----	78	Very limited Seepage, bottom layer Slope Slow water movement	1.00 0.63 0.46	Very limited Seepage Slope	1.00 1.00
684D: Amasa-----	78	Very limited Slope Seepage, bottom layer Slow water movement	1.00 1.00 0.46	Very limited Slope Seepage	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
686B: Annalake-----	40	Very limited Depth to saturated zone Slow water movement	1.00 0.68	Very limited Depth to saturated zone Seepage Slope	1.00 0.68 0.08
Robago-----	40	Very limited Depth to saturated zone Slow water movement	1.00 0.50	Very limited Depth to saturated zone Seepage	1.00 0.50
688: Cathro-----	60	Very limited Flooding Depth to saturated zone Ponding Slow water movement	1.00 1.00 1.00 0.46	Very limited Flooding Depth to saturated zone Seepage Ponding Organic matter content	1.00 1.00 1.00 1.00 1.00
Leafriver-----	40	Very limited Flooding Depth to saturated zone Filtering capacity Seepage, bottom layer Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Flooding Seepage Depth to saturated zone Ponding	1.00 1.00 1.00 1.00
689B: Chabeneau-----	35	Very limited Depth to saturated zone Filtering capacity Seepage, bottom layer	1.00 1.00 1.00	Very limited Seepage Depth to saturated zone	1.00 1.00
Channing-----	30	Very limited Depth to saturated zone Seepage, bottom layer Slow water movement	1.00 1.00 0.50	Very limited Seepage Depth to saturated zone	1.00 1.00
Gogebic-----	25	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Seepage Slope	1.00 1.00 0.50 0.32

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
691B: Dishno-----	35	Very limited Depth to saturated zone Seepage, bottom layer Depth to bedrock Content of large stones	1.00 1.00 0.99 0.08	Very limited Seepage Depth to saturated zone Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.96 0.08 0.06
Tula-----	30	Very limited Depth to cemented pan Depth to saturated zone Slow water movement	1.00 1.00 0.46	Very limited Depth to cemented pan Depth to saturated zone Content of large stones Seepage	1.00 1.00 0.61 0.54
Rock outcrop-----	20	Not rated		Not rated	
691D: Dishno-----	35	Very limited Depth to saturated zone Seepage, bottom layer Slope Depth to bedrock Content of large stones	1.00 1.00 1.00 0.99 0.08	Very limited Seepage Depth to saturated zone Slope Depth to hard bedrock Content of large stones	1.00 1.00 1.00 0.96 0.06
Tula-----	30	Very limited Depth to cemented pan Depth to saturated zone Slow water movement	1.00 1.00 0.46	Very limited Depth to cemented pan Depth to saturated zone Content of large stones Seepage	1.00 1.00 0.61 0.54
Rock outcrop-----	20	Not rated		Not rated	
693B: Chabeneau-----	50	Very limited Depth to saturated zone Filtering capacity Seepage, bottom layer	1.00 1.00 1.00	Very limited Seepage Depth to saturated zone	1.00 1.00
Annalake-----	40	Very limited Depth to saturated zone Slow water movement	1.00 0.68	Very limited Depth to saturated zone Seepage Slope	1.00 0.68 0.08

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
694D:					
Annalake-----	40	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Slope	1.00	Slope	1.00
		Slow water	0.68	Seepage	0.68
		movement			
Stutts-----	35	Very limited		Very limited	
		Seepage, bottom	1.00	Seepage	1.00
		layer		Slope	1.00
		Slope	1.00		
Arnheim-----	25	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Ponding	1.00	Ponding	1.00
		Slow water	0.82	Seepage	0.18
		movement			
5170:					
Minocqua-----	50	Very limited		Very limited	
		Depth to	1.00	Seepage	1.00
		saturated zone		Depth to	1.00
		Seepage, bottom	1.00	saturated zone	
		layer		Ponding	1.00
		Ponding	1.00	Organic matter	1.00
		Slow water	0.46	content	
		movement			
Pleine-----	30	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Ponding	1.00	Ponding	1.00
		Slow water	0.46	Organic matter	1.00
		movement		content	
				Content of large	0.79
				stones	
				Seepage	0.53
Cathro-----	15	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Ponding	1.00	Seepage	1.00
		Slow water	0.46	Ponding	1.00
		movement		Organic matter	1.00
				content	
5171B:					
Tula-----	60	Very limited		Very limited	
		Depth to cemented	1.00	Depth to cemented	1.00
		pan		pan	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Slow water	0.46	Seepage	0.53
		movement		Content of large	0.01
				stones	

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
5171B: Wormet-----	15	Very limited Depth to saturated zone Filtering capacity Seepage, bottom layer	1.00 1.00 1.00	Very limited Seepage Depth to saturated zone	1.00 1.00
Gogebic, sandy substratum-----	15	Very limited Depth to cemented pan Depth to saturated zone Seepage, bottom layer	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Seepage Slope	1.00 1.00 0.50 0.32
5172B: Gogebic, sandy substratum-----	60	Very limited Depth to cemented pan Depth to saturated zone Seepage, bottom layer	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Seepage Slope	1.00 1.00 0.50 0.32
Pence-----	15	Very limited Filtering capacity Seepage, bottom layer	1.00 1.00	Very limited Seepage Slope	1.00 0.08
Cathro-----	15	Very limited Depth to saturated zone Ponding Slow water movement	1.00 1.00 0.46	Very limited Depth to saturated zone Seepage Ponding Organic matter content	1.00 1.00 1.00 1.00
5172C: Gogebic, sandy substratum-----	60	Very limited Depth to cemented pan Depth to saturated zone Seepage, bottom layer Slope	1.00 1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope Seepage	1.00 1.00 1.00 0.50
Pence-----	15	Very limited Filtering capacity Seepage, bottom layer Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13a.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
5172C: Cathro-----	15	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Ponding	1.00	Seepage	1.00
		Slow water	0.46	Ponding	1.00
		movement		Organic matter	1.00
				content	
5172D: Gogebic, sandy substratum-----	60	Very limited		Very limited	
		Depth to cemented	1.00	Depth to cemented	1.00
		pan		pan	
		Depth to	1.00	Slope	1.00
		saturated zone		Depth to	1.00
		Slope	1.00	saturated zone	
		Seepage, bottom	1.00	Seepage	0.50
		layer			
Pence-----	15	Very limited		Very limited	
		Filtering	1.00	Slope	1.00
		capacity		Seepage	1.00
		Slope	1.00		
		Seepage, bottom	1.00		
		layer			
Cathro-----	15	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Ponding	1.00	Seepage	1.00
		Slow water	0.46	Ponding	1.00
		movement		Organic matter	1.00
				content	
5173D: Gogebic, sandy substratum-----	60	Very limited		Very limited	
		Depth to cemented	1.00	Depth to cemented	1.00
		pan		pan	
		Depth to	1.00	Slope	1.00
		saturated zone		Depth to	1.00
		Slope	1.00	saturated zone	
		Seepage, bottom	1.00	Seepage	0.50
		layer			
Pence-----	30	Very limited		Very limited	
		Filtering	1.00	Slope	1.00
		capacity		Seepage	1.00
		Slope	1.00		
		Seepage, bottom	1.00		
		layer			

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7:							
Histosols-----	60	Very limited		Very limited		Very limited	
		Depth to	1.00	Ponding	1.00	Ponding	1.00
		saturated zone		Depth to	1.00	Depth to	1.00
		Ponding	1.00	saturated zone		saturated zone	
		Organic matter	1.00			Organic matter	1.00
		content				content	
		Seepage, bottom	1.00				
		layer					
Aquents-----	40	Very limited		Very limited		Very limited	
		Depth to	1.00	Ponding	1.00	Ponding	1.00
		saturated zone		Depth to	1.00	Depth to	1.00
		Ponding	1.00	saturated zone		saturated zone	
10:							
Witbeck-----	90	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
12A:							
Monico-----	100	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Seepage, bottom	1.00	Seepage	1.00	Seepage	0.52
		layer					
13B:							
Argonne-----	83	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to cemented	1.00	Depth to cemented	1.00
		saturated zone		pan		pan	
		Seepage, bottom	1.00	Depth to	1.00	Depth to	1.00
		layer		saturated zone		saturated zone	
		Depth to thin	0.50	Seepage	1.00	Seepage	0.52
		cemented pan					
13C:							
Argonne-----	83	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to cemented	1.00	Depth to cemented	1.00
		saturated zone		pan		pan	
		Seepage, bottom	1.00	Depth to	1.00	Depth to	1.00
		layer		saturated zone		saturated zone	
		Slope	0.63	Seepage	1.00	Slope	0.63
		Depth to thin	0.50	Slope	0.63	Seepage	0.52
		cemented pan					

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
13D: Argonne-----	86	Very limited Depth to saturated zone Slope Seepage, bottom layer Depth to thin cemented pan	 1.00 1.00 1.00 0.50	Very limited Depth to cemented pan Slope Depth to saturated zone Seepage	 1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone Seepage	 1.00 1.00 1.00 0.52
15B: Wabeno-----	100	Very limited Seepage, bottom layer Depth to saturated zone Depth to thin cemented pan	 1.00 0.95 0.50	Very limited Depth to cemented pan Depth to saturated zone	 1.00 0.44	Very limited Depth to cemented pan Depth to saturated zone Seepage	 1.00 0.68 0.52
15C: Wabeno-----	100	Very limited Seepage, bottom layer Depth to saturated zone Slope Depth to thin cemented pan	 1.00 0.95 0.63 0.50	Very limited Depth to cemented pan Slope Depth to saturated zone	 1.00 0.63 0.44	Very limited Depth to cemented pan Depth to saturated zone Slope Seepage	 1.00 0.68 0.63 0.52
16A: Fence-----	100	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone	 1.00
17B: Lode-----	85	Very limited Seepage, bottom layer Too sandy	 1.00 1.00	Very limited Seepage	 1.00	Very limited Too sandy Seepage	 1.00 1.00
17C: Lode-----	86	Very limited Seepage, bottom layer Too sandy Slope	 1.00 1.00 0.63	Very limited Seepage Slope	 1.00 0.63	Very limited Too sandy Seepage Slope	 1.00 1.00 0.63
20B: Pence-----	62	Very limited Seepage, bottom layer Too sandy	 1.00 1.00	Very limited Seepage	 1.00	Very limited Too sandy Seepage Gravel content	 1.00 1.00 0.05
Lode-----	30	Very limited Seepage, bottom layer Too sandy	 1.00 1.00	Very limited Seepage	 1.00	Very limited Too sandy Seepage	 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
20C: Pence-----	86	Very limited Seepage, bottom layer Too sandy Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 0.63	Very limited Too sandy Seepage Slope Gravel content	1.00 1.00 0.63 0.05
21: Minocqua-----	60	Very limited Depth to saturated zone Seepage, bottom layer Too sandy Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage Ponding Gravel content	1.00 1.00 1.00 1.00 0.01
Leafriver-----	30	Very limited Depth to saturated zone Seepage, bottom layer Too sandy Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage Ponding	1.00 1.00 1.00 1.00
23B: Chabeneau-----	57	Very limited Depth to saturated zone Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone Gravel content	1.00 1.00 1.00 0.79
Karlin-----	28	Very limited Seepage, bottom layer Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
Pence-----	15	Very limited Seepage, bottom layer Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage Gravel content	1.00 1.00 0.05
26B: Stambaugh-----	90	Very limited Seepage, bottom layer Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
27: Lupton-----	50	Very limited Depth to saturated zone Organic matter content Seepage, bottom layer Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding Seepage	1.00 1.00 1.00 0.16

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
27: Tawas-----	48	Very limited Depth to saturated zone Seepage, bottom layer Too sandy Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage Ponding	 1.00 1.00 1.00 1.00
28: Dawson-----	40	Very limited Depth to saturated zone Seepage, bottom layer Organic matter content Too acid Ponding	 1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding Seepage	 1.00 1.00 1.00 0.16
Greenwood-----	35	Very limited Depth to saturated zone Organic matter content Seepage, bottom layer Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding Seepage	 1.00 1.00 1.00 0.63
Loxley-----	20	Very limited Depth to saturated zone Organic matter content Too acid Seepage, bottom layer Ponding	 1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding Seepage	 1.00 1.00 1.00 0.22
29B: Pence, very deep water table-----	85	Very limited Seepage, bottom layer Too sandy	 1.00 1.00	Very limited Seepage	 1.00	Very limited Too sandy Seepage Gravel content	 1.00 1.00 0.07
31: Evart-----	55	Very limited Flooding Depth to saturated zone Seepage, bottom layer Too sandy Ponding	 1.00 1.00 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage Ponding Gravel content	 1.00 1.00 1.00 1.00 0.01

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31: Tawas-----	45	Very limited Depth to saturated zone Seepage, bottom layer Too sandy Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage Ponding	 1.00 1.00 1.00 1.00
32A: Net-----	100	Very limited Depth to saturated zone Depth to thick cemented pan Seepage, bottom layer	 1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Seepage	 1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	 1.00 1.00
35A: Beechwood-----	85	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone	 1.00
36: Gay-----	58	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
Pleine-----	30	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
37B: Gogebic-----	51	Very limited Depth to saturated zone Depth to thick cemented pan Too acid	 1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	 1.00 1.00
Tula-----	31	Very limited Depth to saturated zone Depth to thick cemented pan	 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	 1.00 1.00
Lupton-----	15	Very limited Depth to saturated zone Organic matter content Seepage, bottom layer Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding Seepage	 1.00 1.00 1.00 0.16

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
38B: Gogebic, sandy substratum-----	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to cemented pan	1.00	Depth to cemented pan	1.00
		Depth to thick cemented pan	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00				
		Too acid	1.00				
38C: Gogebic, sandy substratum-----	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to cemented pan	1.00	Depth to cemented pan	1.00
		Depth to thick cemented pan	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Slope	0.63	Slope	0.63
		Too acid	1.00				
		Slope	0.63				
38D: Gogebic, sandy substratum-----	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to cemented pan	1.00	Depth to cemented pan	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to thick cemented pan	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00				
		Too acid	1.00				
39B: Gogebic, sandy substratum-----	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to cemented pan	1.00	Depth to cemented pan	1.00
		Depth to thick cemented pan	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00				
		Too acid	1.00				
39C: Gogebic, sandy substratum-----	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to cemented pan	1.00	Depth to cemented pan	1.00
		Depth to thick cemented pan	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Slope	0.63	Slope	0.63
		Too acid	1.00				
		Slope	0.63				

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
39D: Gogebic, sandy substratum-----	85	Very limited Depth to saturated zone Slope Depth to thick cemented pan Seepage, bottom layer Too acid	1.00 1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00
41: Lupton-----	60	Very limited Depth to saturated zone Organic matter content Seepage, bottom layer Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding Seepage	1.00 1.00 1.00 0.16
Pleine-----	23	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Cathro-----	15	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
42: Ausable-----	70	Very limited Flooding Depth to saturated zone Seepage, bottom layer Too sandy	1.00 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage Gravel content	1.00 1.00 1.00 0.38
Tawas-----	25	Very limited Depth to saturated zone Seepage, bottom layer Too sandy Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage Ponding	1.00 1.00 1.00 1.00
43B: Karlin-----	55	Very limited Seepage, bottom layer Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
Pence-----	40	Very limited Seepage, bottom layer Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage Gravel content	1.00 1.00 0.05

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
43C:							
Karlin-----	55	Very limited Seepage, bottom layer Too sandy Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 0.63	Very limited Too sandy Seepage Slope	1.00 1.00 0.63
Pence-----	40	Very limited Seepage, bottom layer Too sandy Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 0.63	Very limited Too sandy Seepage Slope Gravel content	1.00 1.00 0.63 0.05
43D:							
Karlin-----	55	Very limited Slope Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00	Very limited Slope Too sandy Seepage	1.00 1.00 1.00
Pence-----	40	Very limited Slope Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00	Very limited Slope Too sandy Seepage Gravel content	1.00 1.00 1.00 0.05
44B:							
Karlin-----	36	Very limited Seepage, bottom layer Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
Keweenaw-----	30	Very limited Too sandy	1.00	Not limited		Very limited Too sandy	1.00
Saronia, dense substratum-----	25	Somewhat limited Too sandy	0.50	Very limited Seepage	1.00	Somewhat limited Seepage Too sandy	0.50 0.50
44C:							
Karlin-----	36	Very limited Seepage, bottom layer Too sandy Slope	1.00 1.00 1.00	Very limited Seepage Slope	1.00 1.00	Very limited Too sandy Seepage Slope	1.00 1.00 1.00
Keweenaw-----	30	Very limited Too sandy Slope	1.00 1.00	Very limited Slope	1.00	Very limited Too sandy Slope	1.00 1.00
Saronia, dense substratum-----	25	Somewhat limited Too sandy Slope	0.50 0.16	Very limited Seepage Slope	1.00 0.16	Somewhat limited Seepage Too sandy Slope	0.50 0.50 0.16

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
44D:							
Karlin-----	36	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Too sandy Seepage	1.00
		Too sandy	1.00				
Keweenaw-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
		Too sandy	1.00			Too sandy	1.00
Sarona, dense substratum-----	25	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
		Too sandy	0.50	Seepage	1.00	Seepage	0.50
						Too sandy	0.50
46C:							
Amasa-----	54	Very limited Seepage, bottom layer	1.00	Very limited Seepage	1.00	Very limited Too sandy	1.00
		Too sandy	1.00	Slope	0.16	Seepage	1.00
		Slope	0.16			Slope	0.16
Karlin-----	40	Very limited Seepage, bottom layer	1.00	Very limited Seepage	1.00	Very limited Too sandy	1.00
		Too sandy	1.00	Slope	0.16	Seepage	1.00
		Slope	0.16			Slope	0.16
46D:							
Amasa-----	52	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00			Seepage	1.00
Karlin-----	38	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00			Seepage	1.00
46E:							
Amasa-----	52	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00			Seepage	1.00
Karlin-----	38	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00			Seepage	1.00

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
46F:							
Amasa-----	53	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00			Seepage	1.00
Karlin-----	37	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00			Seepage	1.00
47B:							
Karlin, very deep water table-----	41	Very limited		Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00			Seepage	1.00
Noseum-----	35	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Seepage	1.00
		Too sandy	1.00			Depth to saturated zone	0.86
Gay-----	16	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
48C:							
Karlin-----	75	Very limited		Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00	Slope	1.00	Seepage	1.00
		Slope	1.00			Slope	1.00
Michigamme-----	20	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too acid	1.00	Slope	0.16	Slope	0.16
		Slope	0.16				
48F:							
Karlin-----	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00			Seepage	1.00
Michigamme-----	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too acid	1.00				

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
49B:							
Pelissier-----	52	Very limited Seepage, bottom layer Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage Gravel content	1.00 1.00 0.97
Sarwet-----	35	Very limited Depth to saturated zone Seepage, bottom layer Too sandy	1.00 1.00 0.50	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Seepage Too sandy	1.00 0.52 0.50
49C:							
Pelissier-----	50	Very limited Seepage, bottom layer Too sandy Slope	1.00 1.00 1.00	Very limited Seepage Slope	1.00 1.00	Very limited Too sandy Seepage Slope Gravel content	1.00 1.00 1.00 0.97
Sarwet-----	35	Very limited Depth to saturated zone Slope Seepage, bottom layer Too sandy	1.00 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Slope Seepage	1.00 1.00 1.00	Very limited Slope Depth to saturated zone Seepage Too sandy	1.00 1.00 0.52 0.50
49D:							
Pelissier-----	85	Very limited Slope Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00	Very limited Slope Too sandy Seepage Gravel content	1.00 1.00 1.00 0.97
52B:							
Pence-----	56	Very limited Seepage, bottom layer Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage Gravel content	1.00 1.00 0.05
Vilas-----	35	Very limited Seepage, bottom layer Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
52C:							
Pence-----	56	Very limited Seepage, bottom layer Too sandy Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 0.63	Very limited Too sandy Seepage Slope Gravel content	1.00 1.00 0.63 0.05
Vilas-----	35	Very limited Seepage, bottom layer Too sandy Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 0.63	Very limited Too sandy Seepage Slope	1.00 1.00 0.63

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
53B: Manitowish-----	77	Very limited Depth to saturated zone Seepage, bottom layer Too sandy Too acid	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	 1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone	 1.00 1.00 0.86
Croswell-----	22	Very limited Depth to saturated zone Seepage, bottom layer Too sandy	 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	 1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone	 1.00 1.00 0.86
57B: Karlin-----	70	Very limited Seepage, bottom layer Too sandy	 1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	 1.00 1.00
Manitowish-----	20	Very limited Depth to saturated zone Seepage, bottom layer Too sandy Too acid	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	 1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone	 1.00 1.00 0.86
57C: Karlin-----	75	Very limited Seepage, bottom layer Too sandy Slope	 1.00 1.00 0.63	Very limited Seepage Slope	 1.00 0.63	Very limited Too sandy Seepage Slope	 1.00 1.00 0.63
Manitowish-----	16	Very limited Depth to saturated zone Seepage, bottom layer Too acid Slope	 1.00 1.00 1.00 0.63	Very limited Depth to saturated zone Seepage Slope	 1.00 1.00 0.63	Very limited Too sandy Seepage Depth to saturated zone Slope	 1.00 1.00 0.86 0.63
58B: Vilas, very deep water table-----	40	Very limited Seepage, bottom layer Too sandy	 1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	 1.00 1.00
Croswell-----	22	Very limited Depth to saturated zone Seepage, bottom layer Too sandy	 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	 1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone	 1.00 1.00 0.86

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
58B: Pence, very deep water table-----	20	Very limited Seepage, bottom layer Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage Gravel content	1.00 1.00 0.05
61: Tawas-----	60	Very limited Depth to saturated zone Seepage, bottom layer Too sandy Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage Ponding	1.00 1.00 1.00 1.00
Kinross-----	30	Very limited Depth to saturated zone Seepage, bottom layer Too sandy Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage Ponding	1.00 1.00 1.00 1.00
62B: Pelkie-----	100	Very limited Flooding Depth to saturated zone Seepage, bottom layer Too sandy	1.00 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone	1.00 1.00 0.47
83: Bowstring-----	90	Very limited Flooding Depth to saturated zone Seepage, bottom layer Too sandy Too acid	1.00 1.00 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage Ponding	1.00 1.00 1.00 1.00
141D: Oldman-----	80	Very limited Depth to saturated zone Depth to thick cemented pan Large stones Slope	1.00 1.00 0.96 0.63	Very limited Depth to cemented pan Depth to saturated zone Seepage Slope	1.00 1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Large stones Slope Seepage	1.00 1.00 0.96 0.63 0.09

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
141E: Oldman-----	80	Very limited Depth to saturated zone Slope Depth to thick cemented pan Large stones	 1.00 1.00 1.00 0.96	Very limited Depth to cemented pan Slope Depth to saturated zone Seepage	 1.00 1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone Large stones Seepage	 1.00 1.00 1.00 1.00 0.96 0.09
141F: Porkies-----	80	Very limited Slope Too acid Seepage, bottom layer Depth to thin cemented pan Large stones	 1.00 1.00 1.00 0.50 0.18	Very limited Slope Depth to cemented pan	 1.00 0.42 	Very limited Slope Depth to cemented pan Large stones	 1.00 0.42 0.18
214B: Amnicon-----	60	Very limited Depth to saturated zone Too clayey	 1.00 1.00	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone Too clayey Hard to compact	 1.00 1.00 1.00
Bergland-----	30	Very limited Depth to saturated zone Too clayey Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Too clayey Hard to compact Ponding	 1.00 1.00 1.00 1.00
216B: Amnicon-----	85	Very limited Depth to saturated zone Too clayey	 1.00 1.00	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone Too clayey Hard to compact	 1.00 1.00 1.00
217A: Cuttre-----	85	Very limited Depth to saturated zone Too clayey	 1.00 1.00	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone Too clayey Hard to compact	 1.00 1.00 1.00
218: Bergland-----	80	Very limited Depth to saturated zone Too clayey Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Too clayey Hard to compact Ponding	 1.00 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13b.---Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
219B: Payseor-----	50	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Too sandy	1.00 1.00
Froberg-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
222: Matchwood-----	85	Very limited Depth to saturated zone Ponding Too clayey	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00
225A: Cuttre-----	50	Very limited Depth to saturated zone Too clayey	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Too clayey Hard to compact	1.00 1.00 1.00
Bergland-----	40	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Too clayey Hard to compact Ponding	1.00 1.00 1.00 1.00
226B: Froberg-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
230B: Moquah-----	55	Very limited Depth to saturated zone Flooding	1.00 0.40	Very limited Depth to saturated zone Flooding	1.00 0.40	Not limited	
Arnheim-----	30	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
231: Matchwood-----	45	Very limited Depth to saturated zone Ponding Too clayey	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Too clayey Ponding	1.00 1.00 1.00
Dorval-----	35	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding Gravel content	1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
233: Schaat Creek-----	90	Very limited Flooding Depth to saturated zone Too clayey	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Too clayey	1.00 0.50
239D: Miskoaki-----	85	Very limited Slope Too clayey	1.00 1.00	Very limited Slope	1.00	Very limited Slope Too clayey Hard to compact	1.00 1.00 1.00
277B: Kellogg, sandy substratum-----	50	Very limited Depth to saturated zone Seepage, bottom layer Too clayey	1.00 1.00 0.50	Very limited Seepage Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Too clayey	1.00 0.50
Allendale-----	35	Very limited Depth to saturated zone Too clayey	1.00 0.50	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too clayey	1.00 0.50
280B: Flintsteel-----	85	Very limited Depth to saturated zone Too acid	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
280C: Flintsteel-----	85	Very limited Depth to saturated zone Too acid Slope	1.00 1.00 0.16	Very limited Depth to saturated zone Slope	1.00 0.16	Very limited Depth to saturated zone Slope	1.00 0.16
282B: Big Iron-----	70	Very limited Depth to saturated zone Too acid	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Flintsteel-----	20	Very limited Depth to saturated zone Too acid	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
283B: Loggerhead-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00

Soil Survey of Gogebic County, Michigan

Table 13b.---Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
283B: Noseum-----	30	Very limited Depth to saturated zone Seepage, bottom layer Too sandy	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone	1.00 1.00 0.86
Ubyl-----	20	Very limited Too acid	1.00	Not limited		Not limited	
283C: Loggerhead-----	40	Very limited Depth to saturated zone Slope	1.00 0.16	Very limited Depth to saturated zone Slope	1.00 0.16	Very limited Depth to saturated zone Slope	1.00 0.16
Noseum-----	30	Very limited Depth to saturated zone Seepage, bottom layer Too sandy Slope	1.00 1.00 1.00 1.00 0.01	Very limited Depth to saturated zone Seepage Slope	1.00 1.00 1.00 0.01	Very limited Too sandy Seepage Depth to saturated zone Slope	1.00 1.00 0.86 0.01
Ubyl-----	20	Very limited Too acid Slope	1.00 0.01	Somewhat limited Slope	0.01	Somewhat limited Slope	0.01
284: Aqents-----	55	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
Gull Point-----	40	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone	1.00
285F: Rockland-----	70	Very limited Slope Too acid	1.00 1.00	Very limited Slope	1.00	Very limited Slope	1.00
Arnheim-----	15	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
286A: Big Iron-----	65	Very limited Depth to saturated zone Too acid	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
286A: Belding-----	20	Very limited Depth to saturated zone Too clayey	1.00 0.50	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too clayey	1.00 0.50
287: Trap Falls-----	55	Very limited Depth to saturated zone Too acid Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Tonkey-----	35	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
289B: Amasa-----	95	Very limited Seepage, bottom layer Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
290B: Flintsteel-----	80	Very limited Depth to saturated zone Too acid	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
290C: Flintsteel-----	85	Very limited Depth to saturated zone Too acid Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Depth to saturated zone Slope	1.00 0.63
291B: Kalkaska-----	80	Very limited Seepage, bottom layer Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
291D: Kalkaska-----	85	Very limited Seepage, bottom layer Too sandy Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 0.63	Very limited Too sandy Seepage Slope	1.00 1.00 0.63
292B: Manido-----	45	Very limited Depth to saturated zone Seepage, bottom layer Too sandy Too acid	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone	1.00 1.00 0.86

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
292B: Richter-----	40	Very limited Depth to saturated zone Too acid	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
293A: Wainola-----	55	Very limited Depth to saturated zone Seepage, bottom layer Too sandy	1.00 1.00 0.50	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Seepage Too sandy	1.00 1.00 0.50
Trap Falls-----	25	Very limited Depth to saturated zone Too acid Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
296B: Manido-----	35	Very limited Depth to saturated zone Seepage, bottom layer Too sandy Too acid	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Seepage Depth to saturated zone Too sandy	1.00 0.86 0.50
Fence-----	30	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Gogebic, sandy substratum-----	20	Very limited Depth to saturated zone Depth to thick cemented pan Seepage, bottom layer Too acid	1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
296D: Manido-----	35	Very limited Depth to saturated zone Slope Seepage, bottom layer Too sandy Too acid	1.00 1.00 1.00 1.00	Very limited Slope Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Slope Seepage Depth to saturated zone Too sandy	1.00 1.00 0.86 0.50
Sporley-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
296D: Gogebic, sandy substratum-----	20	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to cemented	1.00	Depth to cemented	1.00
		saturated zone		pan		pan	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to thick	1.00	Depth to	1.00	Depth to	1.00
		cemented pan		saturated zone		saturated zone	
		Seepage, bottom	1.00				
		layer					
		Too acid	1.00				
299B: Zandi-----	40	Not limited		Not limited		Not limited	
Amasa-----	30	Very limited		Very limited		Very limited	
		Seepage, bottom	1.00	Seepage	1.00	Too sandy	1.00
		layer				Seepage	1.00
		Too sandy	1.00				
Flintsteel-----	20	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Too acid	1.00				
299C: Zandi-----	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63	Slope	0.63
Amasa-----	30	Very limited		Very limited		Very limited	
		Seepage, bottom	1.00	Seepage	1.00	Too sandy	1.00
		layer		Slope	0.63	Seepage	1.00
		Too sandy	1.00			Slope	0.63
		Slope	0.63				
Flintsteel-----	20	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Too acid	1.00	Slope	0.63	Slope	0.63
		Slope	0.63				
301A: Moodig-----	86	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
302B: Manitowish-----	85	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Too sandy	1.00
		saturated zone		saturated zone		Seepage	1.00
		Seepage, bottom	1.00	Seepage	1.00	Depth to	0.86
		layer				saturated zone	
		Too sandy	1.00				
		Too acid	1.00				

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
302C: Manitowish-----	85	Very limited Depth to saturated zone Seepage, bottom layer Too sandy Too acid Slope	 1.00 1.00 1.00 1.00 1.00 0.63	Very limited Depth to saturated zone Seepage Slope	 1.00 1.00 0.63	Very limited Too sandy Seepage Depth to saturated zone Slope	 1.00 1.00 0.86 0.63
303: Bowstring-----	50	Very limited Flooding Depth to saturated zone Seepage, bottom layer Too sandy Ponding	 1.00 1.00 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage Ponding	 1.00 1.00 1.00 1.00
Arnheim-----	40	Very limited Flooding Depth to saturated zone Ponding	 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
305B: Keweenaw-----	45	Very limited Too sandy	 1.00	Not limited		Very limited Too sandy	 1.00
Siskiwit-----	40	Very limited Depth to saturated zone Seepage, bottom layer Too sandy	 1.00 1.00 1.00	Very limited Depth to saturated zone	 1.00	Very limited Too sandy Depth to saturated zone Seepage	 1.00 0.86 0.50
305C: Keweenaw-----	45	Very limited Too sandy Slope	 1.00 0.16	Somewhat limited Slope	 0.16	Very limited Too sandy Slope	 1.00 0.16
Siskiwit-----	40	Very limited Depth to saturated zone Seepage, bottom layer Too sandy	 1.00 1.00 1.00	Very limited Depth to saturated zone	 1.00	Very limited Too sandy Depth to saturated zone Seepage	 1.00 0.86 0.50
307: Lupton-----	45	Very limited Depth to saturated zone Organic matter content Seepage, bottom layer Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding Seepage	 1.00 1.00 1.00 0.16

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
307: Cathro-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
309: Cathro-----	85	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
310B: Gogebic-----	92	Very limited Depth to saturated zone Depth to thick cemented pan Too acid	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
310C: Gogebic-----	92	Very limited Depth to saturated zone Depth to thick cemented pan Too acid Slope	1.00 1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63
310D: Gogebic-----	92	Very limited Depth to saturated zone Slope Depth to thick cemented pan Too acid	1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00
310E: Schweitzer-----	90	Very limited Slope Depth to thick cemented pan Large stones	1.00 1.00 0.32	Very limited Depth to cemented pan Slope	1.00 1.00	Very limited Depth to cemented pan Slope Large stones	1.00 1.00 0.32
311B: Tula-----	45	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
Gogebic-----	40	Very limited Depth to saturated zone Depth to thick cemented pan Too acid	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
312A: Tula-----	35	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
Foxpaw-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Gay-----	25	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
316: Gay-----	85	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
317B: Gogebic-----	95	Very limited Depth to saturated zone Depth to thick cemented pan Too acid	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
317C: Gogebic-----	90	Very limited Depth to saturated zone Depth to thick cemented pan Too acid Slope	1.00 1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63
317D: Gogebic-----	88	Very limited Depth to saturated zone Slope Depth to thick cemented pan Too acid	1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00
319B: McMillan-----	45	Very limited Seepage, bottom layer Too sandy	1.00 0.50	Very limited Seepage	1.00	Very limited Seepage Too sandy	1.00 0.50

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
319B: Noseum-----	40	Very limited Depth to saturated zone Seepage, bottom layer Too sandy	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone	1.00 1.00 0.86
319C: McMillan-----	45	Very limited Seepage, bottom layer Slope Too sandy	1.00 0.63 0.50	Very limited Seepage Slope	1.00 0.63	Very limited Seepage Slope Too sandy	1.00 0.63 0.50
Islandlake-----	40	Very limited Seepage, bottom layer Too sandy Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 0.63	Very limited Too sandy Seepage Slope	1.00 1.00 0.63
319D: McMillan-----	45	Very limited Slope Seepage, bottom layer Too sandy	1.00 1.00 0.50	Very limited Slope Seepage	1.00 1.00	Very limited Slope Seepage Too sandy	1.00 1.00 0.50
Islandlake-----	40	Very limited Slope Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00	Very limited Slope Too sandy Seepage	1.00 1.00 1.00
319E: McMillan-----	45	Very limited Slope Seepage, bottom layer Too sandy	1.00 1.00 0.50	Very limited Slope Seepage	1.00 1.00	Very limited Slope Seepage Too sandy	1.00 1.00 0.50
Islandlake-----	40	Very limited Slope Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00	Very limited Slope Too sandy Seepage	1.00 1.00 1.00
322B: Stutts-----	60	Very limited Seepage, bottom layer Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
Keweenaw-----	30	Very limited Too sandy	1.00	Not limited		Very limited Too sandy	1.00

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
322C: Stutts-----	60	Very limited Seepage, bottom layer Too sandy Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 0.63	Very limited Too sandy Seepage Slope	1.00 1.00 0.63
Keweenaw-----	30	Very limited Too sandy Slope	1.00 0.63	Somewhat limited Slope	0.63	Very limited Too sandy Slope	1.00 0.63
322D: Stutts-----	60	Very limited Slope Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00	Very limited Slope Too sandy Seepage	1.00 1.00 1.00
Keweenaw-----	30	Very limited Slope Too sandy	1.00 1.00	Very limited Slope	1.00	Very limited Slope Too sandy	1.00 1.00
323B: Keweenaw-----	50	Very limited Too sandy	1.00	Not limited		Very limited Too sandy	1.00
Kalkaska-----	40	Very limited Seepage, bottom layer Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
323C: Keweenaw-----	50	Very limited Too sandy Slope	1.00 0.63	Somewhat limited Slope	0.63	Very limited Too sandy Slope	1.00 0.63
Kalkaska-----	40	Very limited Seepage, bottom layer Too sandy Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 0.63	Very limited Too sandy Seepage Slope	1.00 1.00 0.63
323D: Keweenaw-----	50	Very limited Slope Too sandy	1.00 1.00	Very limited Slope	1.00	Very limited Slope Too sandy	1.00 1.00
Kalkaska-----	40	Very limited Slope Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00	Very limited Slope Too sandy Seepage	1.00 1.00 1.00
325B: Siskiwit-----	55	Very limited Depth to saturated zone Seepage, bottom layer	1.00 1.00	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone Seepage	0.86 0.50

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
325B: Gogebic-----	45	Very limited Depth to saturated zone Depth to thick cemented pan Too acid	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
325C: Siskiwit-----	55	Very limited Depth to saturated zone Seepage, bottom layer	1.00 1.00	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone Seepage	0.86 0.50
Gogebic-----	45	Very limited Depth to saturated zone Depth to thick cemented pan Too acid Slope	1.00 1.00 1.00 0.04	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.04	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.04
327: Foxpaw-----	60	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Sarwet-----	40	Very limited Depth to saturated zone Seepage, bottom layer Too sandy	1.00 1.00 0.50	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Seepage Too sandy	1.00 0.52 0.50
328B: Annalake-----	50	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Too sandy Depth to saturated zone	1.00 1.00
Karlin-----	36	Very limited Seepage, bottom layer Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
328C: Annalake-----	50	Very limited Depth to saturated zone Too sandy Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Too sandy Depth to saturated zone Slope	1.00 1.00 0.63
Karlin-----	40	Very limited Seepage, bottom layer Too sandy Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 0.63	Very limited Too sandy Seepage Slope	1.00 1.00 0.63

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
328D: Karlin-----	50	Very limited Slope Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00	Very limited Slope Too sandy Seepage	1.00 1.00 1.00
Zandi-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
329A: Tula-----	90	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
351B: Gogebic-----	85	Very limited Depth to saturated zone Depth to thick cemented pan Too acid	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
351C: Gogebic-----	85	Very limited Depth to saturated zone Depth to thick cemented pan Too acid Slope	1.00 1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63
351D: Gogebic-----	85	Very limited Depth to saturated zone Slope Depth to thick cemented pan Too acid	1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00
351E: Schweitzer-----	85	Very limited Slope Depth to thick cemented pan Large stones	1.00 1.00 0.22	Very limited Depth to cemented pan Slope	1.00 1.00	Very limited Depth to cemented pan Slope Large stones	1.00 1.00 0.22
351F: Schweitzer-----	90	Very limited Slope Depth to thick cemented pan Large stones	1.00 1.00 0.22	Very limited Depth to cemented pan Slope	1.00 1.00	Very limited Depth to cemented pan Slope Large stones	1.00 1.00 0.22

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
353A: Tula-----	85	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
354B: Gogebic-----	90	Very limited Depth to saturated zone Depth to thick cemented pan Too acid	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
354C: Gogebic-----	90	Very limited Depth to saturated zone Depth to thick cemented pan Too acid Slope	1.00 1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63
354D: Gogebic-----	85	Very limited Depth to saturated zone Slope Depth to thick cemented pan Too acid	1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00
354E: Schweitzer-----	85	Very limited Slope Depth to thick cemented pan Large stones	1.00 1.00 0.32	Very limited Depth to cemented pan Slope	1.00 1.00	Very limited Depth to cemented pan Slope Large stones	1.00 1.00 0.32
354F: Schweitzer-----	90	Very limited Slope Depth to thick cemented pan Large stones	1.00 1.00 0.32	Very limited Depth to cemented pan Slope	1.00 1.00	Very limited Depth to cemented pan Slope Large stones	1.00 1.00 0.32
363C: Talus-----	50	Not rated		Not rated		Not rated	
Arcadian-----	35	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to bedrock Gravel content Slope	1.00 1.00 0.63

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
363D: Talus-----	46	Not rated		Not rated		Not rated	
Arcadian-----	35	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
363E: Talus-----	50	Not rated		Not rated		Not rated	
Arcadian-----	35	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
363F: Talus-----	50	Not rated		Not rated		Not rated	
Arcadian-----	35	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
364F: Talus-----	91	Not rated		Not rated		Not rated	
365F: Rock outcrop-----	90	Not rated		Not rated		Not rated	
369C: Dishno-----	35	Very limited Depth to saturated zone Depth to bedrock Seepage, bottom layer Slope Too sandy	1.00 1.00 1.00 0.63 0.50	Very limited Depth to saturated zone Seepage Depth to bedrock Slope	1.00 1.00 0.77 0.63	Somewhat limited Depth to saturated zone Depth to bedrock Slope Seepage Too sandy	0.86 0.77 0.63 0.52 0.50
Gogebic-----	30	Very limited Depth to saturated zone Depth to thick cemented pan Too acid Slope	1.00 1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63
Peshekee-----	15	Very limited Depth to bedrock Slope Large stones	1.00 0.63 0.02	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to bedrock Slope Large stones	1.00 0.63 0.02
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
369D: Dishno-----	35	Very limited Depth to saturated zone Slope Depth to bedrock Seepage, bottom layer Too sandy	 1.00 1.00 1.00 1.00 0.50	Very limited Slope Depth to saturated zone Seepage Depth to bedrock	 1.00 1.00 1.00 0.77 	Very limited Slope Depth to saturated zone Depth to bedrock Seepage Too sandy	 1.00 0.86 0.77 0.52 0.50
Gogebic-----	30	Very limited Depth to saturated zone Slope Depth to thick cemented pan Too acid	 1.00 1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	 1.00 1.00 1.00 1.00 	Very limited Depth to cemented pan Slope Depth to saturated zone	 1.00 1.00 1.00
Peshekee-----	15	Very limited Slope Depth to bedrock Large stones	 1.00 1.00 0.02	Very limited Slope Depth to bedrock	 1.00 1.00	Very limited Depth to bedrock Slope Large stones	 1.00 1.00 0.02
Rock outcrop-----	15	Not rated		Not rated		Not rated	
369E: Michigamme-----	30	Very limited Slope Depth to bedrock Too acid	 1.00 1.00 1.00	Very limited Slope Depth to bedrock	 1.00 1.00	Very limited Depth to bedrock Slope	 1.00 1.00
Schweitzer-----	25	Very limited Slope Depth to thick cemented pan Large stones	 1.00 1.00 1.00 0.32	Very limited Depth to cemented pan Slope	 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Large stones	 1.00 1.00 0.32
Peshekee-----	20	Very limited Slope Depth to bedrock Large stones	 1.00 1.00 0.02	Very limited Slope Depth to bedrock	 1.00 1.00	Very limited Depth to bedrock Slope Large stones	 1.00 1.00 0.02
Rock outcrop-----	15	Not rated		Not rated		Not rated	
369F: Michigamme-----	30	Very limited Slope Depth to bedrock Too acid	 1.00 1.00 1.00	Very limited Slope Depth to bedrock	 1.00 1.00	Very limited Depth to bedrock Slope	 1.00 1.00
Schweitzer-----	25	Very limited Slope Depth to thick cemented pan Large stones	 1.00 1.00 1.00 0.32	Very limited Depth to cemented pan Slope	 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Large stones	 1.00 1.00 0.32

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
369F: Peshekee-----	20	Very limited Slope Depth to bedrock Large stones	 1.00 1.00 0.02	Very limited Slope Depth to bedrock	 1.00 1.00	Very limited Depth to bedrock Slope Large stones	 1.00 1.00 0.02
Rock outcrop-----	15	Not rated		Not rated		Not rated	
370E: Peshekee-----	55	Very limited Slope Depth to bedrock Large stones	 1.00 1.00 0.02	Very limited Slope Depth to bedrock	 1.00 1.00	Very limited Depth to bedrock Slope Large stones	 1.00 1.00 0.02
Rock outcrop-----	40	Not rated		Not rated		Not rated	
370F: Peshekee-----	55	Very limited Slope Depth to bedrock Large stones	 1.00 1.00 0.02	Very limited Slope Depth to bedrock	 1.00 1.00	Very limited Depth to bedrock Slope Large stones	 1.00 1.00 0.02
Rock outcrop-----	40	Not rated		Not rated		Not rated	
375: Dumps and Pits, mine	95	Not rated		Not rated		Not rated	
380: Beseman-----	55	Very limited Depth to saturated zone Organic matter content Too acid Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding Seepage	 1.00 1.00 1.00 0.63
Greenwood-----	40	Very limited Depth to saturated zone Organic matter content Seepage, bottom layer Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding Seepage	 1.00 1.00 1.00 0.63
382: Cathro-----	45	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
Arnheim-----	44	Very limited Flooding Depth to saturated zone Ponding	 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
388: Gay-----	50	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Tula-----	40	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
398B: Tula-----	50	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
Gay-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Wakefield-----	15	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
418: Loxley-----	45	Very limited Depth to saturated zone Organic matter content Too acid Seepage, bottom layer Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding Seepage	1.00 1.00 1.00 0.16
Beseman-----	41	Very limited Depth to saturated zone Organic matter content Too acid Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Organic matter content Ponding Seepage	1.00 1.00 1.00 0.63
419: Pleine-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
419: Cathro-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Gay-----	25	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
424: Gay-----	85	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
425: Foxpaw-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Gay-----	40	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
428C: Gogebic-----	70	Very limited Depth to saturated zone Depth to thick cemented pan Too acid Slope	1.00 1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63
Michigamme-----	25	Very limited Depth to bedrock Too acid Slope	1.00 1.00 0.63	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to bedrock Slope	1.00 0.63
428D: Gogebic-----	70	Very limited Depth to saturated zone Slope Depth to thick cemented pan Too acid	1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00
Michigamme-----	25	Very limited Slope Depth to bedrock Too acid	1.00 1.00 1.00	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope Depth to bedrock	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
429B: Gogebic-----	79	Very limited Depth to saturated zone Depth to thick cemented pan Too acid	 1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	 1.00 1.00
Peshekee-----	15	Very limited Depth to bedrock Large stones	 1.00 0.02	Very limited Depth to bedrock	1.00	Very limited Depth to bedrock Large stones	 1.00 0.02
429C: Gogebic-----	79	Very limited Depth to saturated zone Depth to thick cemented pan Too acid Slope	 1.00 1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	 1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	 1.00 1.00 0.63
Peshekee-----	15	Very limited Depth to bedrock Slope Large stones	 1.00 0.63 0.02	Very limited Depth to bedrock Slope	 1.00 0.63	Very limited Depth to bedrock Slope Large stones	 1.00 0.63 0.02
429D: Gogebic-----	75	Very limited Depth to saturated zone Slope Depth to thick cemented pan Too acid	 1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	 1.00 1.00 1.00
Peshekee-----	15	Very limited Slope Depth to bedrock Large stones	 1.00 1.00 0.02	Very limited Slope Depth to bedrock	 1.00 1.00	Very limited Depth to bedrock Slope Large stones	 1.00 1.00 0.02
429E: Schweitzer-----	60	Very limited Slope Depth to thick cemented pan Large stones	 1.00 1.00 0.32	Very limited Depth to cemented pan Slope	 1.00 1.00	Very limited Depth to cemented pan Slope Large stones	 1.00 1.00 0.32
Peshekee-----	35	Very limited Slope Depth to bedrock Large stones	 1.00 1.00 0.02	Very limited Slope Depth to bedrock	 1.00 1.00	Very limited Depth to bedrock Slope Large stones	 1.00 1.00 0.02
430B: Stutts-----	90	Very limited Seepage, bottom layer Too sandy	 1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	 1.00 0.50

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
430C: Stutts-----	90	Very limited Seepage, bottom layer Too sandy Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 0.63	Very limited Too sandy Seepage Slope	1.00 1.00 0.63
430D: Stutts-----	90	Very limited Slope Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00	Very limited Slope Too sandy Seepage	1.00 1.00 0.50
430E: Stutts-----	90	Very limited Slope Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00	Very limited Slope Too sandy Seepage	1.00 1.00 0.50
432C: Gogebic-----	68	Very limited Depth to saturated zone Depth to thick cemented pan Too acid Slope	1.00 1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63
Michigamme-----	15	Very limited Depth to bedrock Too acid Slope	1.00 1.00 0.63	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to bedrock Slope	1.00 0.63
Rock outcrop-----	15	Not rated		Not rated		Not rated	
432D: Gogebic-----	68	Very limited Depth to saturated zone Depth to thick cemented pan Slope Too acid	1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 1.00
Michigamme-----	15	Very limited Depth to bedrock Seepage, bottom layer Slope Too acid	1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Slope	1.00 1.00 1.00	Very limited Depth to bedrock Slope Seepage	1.00 1.00 0.52
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
432E:							
Schweitzer-----	45	Very limited Slope	1.00	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
		Depth to thick cemented pan	1.00	Slope	1.00	Slope	1.00
		Large stones	0.32			Large stones	0.32
Michigamme-----	20	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Too acid	1.00	Depth to bedrock	1.00	Seepage	0.52
Rock outcrop-----	20	Not rated		Not rated		Not rated	
432F:							
Schweitzer-----	45	Very limited Slope	1.00	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
		Depth to thick cemented pan	1.00	Slope	1.00	Slope	1.00
		Large stones	0.32			Large stones	0.32
Michigamme-----	20	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Too acid	1.00	Depth to bedrock	1.00	Seepage	0.52
Rock outcrop-----	20	Not rated		Not rated		Not rated	
433B:							
McMillan-----	85	Very limited Seepage, bottom layer	1.00	Very limited Seepage	1.00	Very limited Seepage	1.00
		Too sandy	0.50			Too sandy	0.50
433C:							
McMillan-----	85	Very limited Seepage, bottom layer	1.00	Very limited Seepage	1.00	Very limited Seepage	1.00
		Slope	0.63	Slope	0.63	Slope	0.63
		Too sandy	0.50			Too sandy	0.50
433D:							
McMillan-----	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Seepage	1.00
		Too sandy	0.50			Too sandy	0.50
435C:							
Kalkaska-----	45	Very limited Seepage, bottom layer	1.00	Very limited Seepage	1.00	Very limited Too sandy	1.00
		Too sandy	1.00	Slope	0.16	Seepage	1.00
		Slope	0.16			Slope	0.16
Waiska-----	40	Very limited Seepage, bottom layer	1.00	Very limited Seepage	1.00	Very limited Too sandy	1.00
		Too sandy	1.00	Slope	0.16	Seepage	1.00
		Slope	0.16			Gravel content	1.00
						Slope	0.16

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
435D:							
Kalkaska-----	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00			Seepage	1.00
Waika-----	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00			Seepage	1.00
						Gravel content	1.00
435E:							
Kalkaska-----	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00			Seepage	1.00
Waika-----	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00			Seepage	1.00
						Gravel content	1.00
437B:							
Manitowish-----	65	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Too sandy	1.00
		saturated zone		saturated zone		Seepage	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Depth to	0.86
		Too sandy	1.00			saturated zone	
		Too acid	1.00				
Channing-----	20	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Seepage, bottom layer	1.00	Seepage	1.00	Too sandy	1.00
		Too sandy	1.00			Seepage	1.00
						Gravel content	0.09
448F:							
Rockland-----	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too acid	1.00				
Rock outcrop-----	25	Not rated		Not rated		Not rated	
449C:							
Flintsteel-----	70	Very limited		Very limited		Very limited	
		Depth to	1.00	Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone		saturated zone	
		Too acid	1.00	Slope	0.63	Slope	0.63
		Slope	0.63				

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
449C: Minocqua-----	30	Very limited Depth to saturated zone Seepage, bottom layer Too sandy Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage Ponding Gravel content	 1.00 1.00 1.00 1.00 0.01
452F: Rockland-----	90	Very limited Slope Too acid	 1.00 1.00	Very limited Slope	 1.00	Very limited Slope	 1.00
460B: Belding-----	55	Very limited Depth to saturated zone Too clayey	 1.00 0.50	Very limited Depth to saturated zone Seepage	 1.00 1.00	Very limited Depth to saturated zone Too clayey	 1.00 0.50
Manido-----	25	Very limited Depth to saturated zone Seepage, bottom layer Too sandy Too acid	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	 1.00 1.00	Very limited Seepage Depth to saturated zone Too sandy	 1.00 0.86 0.50
461B: Loggerhead-----	85	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone	 1.00
462C: Nonesuch-----	75	Very limited Depth to saturated zone Depth to bedrock Depth to thin cemented pan Slope	 1.00 1.00 0.50 0.04	Very limited Depth to cemented pan Depth to saturated zone Depth to bedrock Slope	 1.00 1.00 1.00 0.04	Very limited Depth to cemented pan Depth to bedrock Depth to saturated zone Gravel content Slope	 1.00 1.00 1.00 0.84 0.04
Rock outcrop-----	15	Not rated		Not rated		Not rated	
509: Cathro-----	45	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
Minocqua-----	40	Very limited Depth to saturated zone Seepage, bottom layer Too sandy Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage Ponding Gravel content	 1.00 1.00 1.00 1.00 0.01

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
511A: Gogebic-----	40	Very limited Depth to saturated zone Depth to thick cemented pan Too acid	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
Tula-----	30	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
Chabeneau-----	15	Very limited Depth to saturated zone Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone Gravel content	1.00 1.00 1.00 0.79
519B: Gogebic-----	50	Very limited Depth to saturated zone Depth to thick cemented pan Too acid	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
Karlin-----	40	Very limited Seepage, bottom layer Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
519C: Gogebic-----	50	Very limited Depth to saturated zone Depth to thick cemented pan Too acid Slope	1.00 1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63
Karlin-----	40	Very limited Seepage, bottom layer Too sandy Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 0.63	Very limited Too sandy Seepage Slope	1.00 1.00 0.63
519D: Gogebic-----	50	Very limited Depth to saturated zone Slope Depth to thick cemented pan Too acid	1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
519D: Karlin-----	40	Very limited Slope Seepage, bottom layer Too sandy	 1.00 1.00 1.00	Very limited Slope Seepage	 1.00 1.00	Very limited Slope Too sandy Seepage	 1.00 1.00 1.00
522: Pits, sand and gravel-----	100	Not rated		Not rated		Not rated	
523D: Gogebic, sandy substratum-----	53	Very limited Depth to saturated zone Depth to thick cemented pan Seepage, bottom layer Slope Too acid	 1.00 1.00 1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Slope	 1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Slope	 1.00 1.00 1.00
Karlin-----	40	Very limited Seepage, bottom layer Too sandy Slope	 1.00 1.00 1.00	Very limited Seepage Slope	 1.00 1.00	Very limited Too sandy Seepage Slope	 1.00 1.00 1.00
524C: Waiska-----	45	Very limited Seepage, bottom layer Too sandy Slope	 1.00 1.00 0.63	Very limited Seepage Slope	 1.00 0.63	Very limited Too sandy Seepage Gravel content Slope	 1.00 1.00 1.00 0.63
Amasa-----	40	Very limited Seepage, bottom layer Too sandy Slope	 1.00 1.00 0.63	Very limited Seepage Slope	 1.00 0.63	Very limited Too sandy Seepage Slope	 1.00 1.00 0.63
524D: Waiska-----	45	Very limited Slope Seepage, bottom layer Too sandy	 1.00 1.00 1.00	Very limited Slope Seepage	 1.00 1.00	Very limited Slope Too sandy Seepage Gravel content	 1.00 1.00 1.00 1.00
Amasa-----	40	Very limited Slope Seepage, bottom layer Too sandy	 1.00 1.00 1.00	Very limited Slope Seepage	 1.00 1.00	Very limited Slope Too sandy Seepage	 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
524E: Waiska-----	45	Very limited Slope Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00	Very limited Slope Too sandy Seepage Gravel content	1.00 1.00 1.00 1.00
Amasa-----	40	Very limited Slope Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00	Very limited Slope Too sandy Seepage	1.00 1.00 1.00
527B: Wakefield-----	85	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
527C: Wakefield-----	85	Very limited Depth to saturated zone Depth to thick cemented pan Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63
527D: Wakefield-----	85	Very limited Depth to saturated zone Slope Depth to thick cemented pan	1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00
528B: Gogebic-----	48	Very limited Depth to saturated zone Depth to thick cemented pan Too acid	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
Annalake-----	45	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Too sandy Depth to saturated zone	1.00 1.00
528C: Gogebic-----	48	Very limited Depth to saturated zone Depth to thick cemented pan Too acid Slope	1.00 1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
528C: Annalake-----	45	Very limited Depth to saturated zone Too sandy Slope	1.00 1.00 0.63	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Too sandy Depth to saturated zone Slope	1.00 1.00 0.63
528D: Gogebic-----	48	Very limited Depth to saturated zone Slope Depth to thick cemented pan Too acid	1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00
Annalake-----	45	Very limited Depth to saturated zone Slope Too sandy	1.00 1.00 1.00	Very limited Slope Depth to saturated zone	1.00 1.00	Very limited Slope Too sandy Depth to saturated zone	1.00 1.00 1.00
551B: Gogebic-----	65	Very limited Depth to saturated zone Depth to thick cemented pan Too acid	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
Dishno-----	30	Very limited Depth to saturated zone Depth to bedrock Seepage, bottom layer Too sandy Large stones	1.00 1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Seepage Depth to bedrock	1.00 1.00 0.96	Somewhat limited Depth to bedrock Depth to saturated zone Seepage Too sandy Large stones	0.96 0.86 0.52 0.50 0.10
566: Beach, rubbly-----	95	Not rated		Not rated		Not rated	
576B: Flintsteel-----	45	Very limited Depth to saturated zone Too acid	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Loggerhead-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
576C: Flintsteel-----	45	Very limited Depth to saturated zone Too acid Slope	1.00 1.00 0.16	Very limited Depth to saturated zone Slope	1.00 0.16	Very limited Depth to saturated zone Slope	1.00 0.16

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
576C: Loggerhead-----	40	Very limited Depth to saturated zone Slope	1.00 0.16	Very limited Depth to saturated zone Slope	1.00 0.16	Very limited Depth to saturated zone Slope	1.00 0.16
576D: Flintsteel-----	45	Very limited Depth to saturated zone Slope Too acid	1.00 1.00 1.00	Very limited Slope Depth to saturated zone	1.00 1.00	Very limited Slope Depth to saturated zone	1.00 1.00
Loggerhead-----	40	Very limited Depth to saturated zone Slope	1.00 1.00	Very limited Slope Depth to saturated zone	1.00 1.00	Very limited Slope Depth to saturated zone	1.00 1.00
577B: Loggerhead-----	35	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Chabeneau-----	30	Very limited Depth to saturated zone Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone Gravel content	1.00 1.00 1.00 0.79
Arcadian-----	25	Very limited Depth to bedrock	1.00	Very limited Depth to bedrock	1.00	Very limited Depth to bedrock Gravel content	1.00 1.00
577C: Loggerhead-----	35	Very limited Depth to saturated zone Slope	1.00 0.16	Very limited Depth to saturated zone Slope	1.00 0.16	Very limited Depth to saturated zone Slope	1.00 0.16
Chabeneau-----	30	Very limited Depth to saturated zone Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone Gravel content	1.00 1.00 1.00 0.79
Arcadian-----	25	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to bedrock Gravel content Slope	1.00 1.00 0.63
577D: Loggerhead-----	35	Very limited Depth to saturated zone Slope	1.00 1.00	Very limited Slope Depth to saturated zone	1.00 1.00	Very limited Slope Depth to saturated zone	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
577D: Chabeneau-----	30	Very limited Depth to saturated zone Seepage, bottom layer Too sandy Slope	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Slope	 1.00 1.00 1.00	Very limited Too sandy Seepage Slope Depth to saturated zone Gravel content	 1.00 1.00 1.00 1.00 0.79
Arcadian-----	25	Very limited Slope Depth to bedrock	 1.00 1.00	Very limited Slope Depth to bedrock	 1.00 1.00	Very limited Depth to bedrock Slope Gravel content	 1.00 1.00 1.00
578D: Arcadian-----	59	Very limited Depth to bedrock Slope	 1.00 1.00	Very limited Depth to bedrock Slope	 1.00 1.00	Very limited Depth to bedrock Slope Gravel content	 1.00 1.00 1.00
Keweenaw-----	40	Very limited Too sandy Slope	 1.00 1.00	Very limited Slope	1.00	Very limited Too sandy Slope	 1.00 1.00
625B: Fence-----	95	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
625C: Fence-----	98	Very limited Depth to saturated zone Slope	 1.00 0.63	Very limited Depth to saturated zone Slope	 1.00 0.63	Very limited Depth to saturated zone Slope	 1.00 0.63
626D: Sporley-----	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
626E: Sporley-----	90	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
648B: Annalake-----	93	Very limited Depth to saturated zone Too sandy	 1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Too sandy Depth to saturated zone	 1.00 1.00
648C: Annalake-----	93	Very limited Depth to saturated zone Too sandy Slope	 1.00 1.00 0.63	Very limited Depth to saturated zone Slope	 1.00 0.63	Very limited Too sandy Depth to saturated zone Slope	 1.00 1.00 0.63

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
650: Leafriver-----	90	Very limited Depth to saturated zone Seepage, bottom layer Too sandy Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage Ponding	1.00 1.00 1.00 1.00
652B: Manido-----	52	Very limited Depth to saturated zone Seepage, bottom layer Too sandy Too acid	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Seepage Depth to saturated zone Too sandy	1.00 0.86 0.50
Annalake-----	24	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Too sandy Depth to saturated zone	1.00 1.00
656B: Stutts-----	60	Very limited Seepage, bottom layer Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 0.50
Zandi-----	30	Not limited		Not limited		Not limited	
656C: Stutts-----	60	Very limited Seepage, bottom layer Too sandy Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 0.63	Very limited Too sandy Slope Seepage	1.00 0.63 0.50
Zandi-----	30	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63
656D: Stutts-----	60	Very limited Slope Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00	Very limited Slope Too sandy Seepage	1.00 1.00 0.50
Zandi-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
680B: Tonkey-----	37	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
680B: Pleine-----	32	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Annalake-----	20	Very limited Depth to saturated zone Too sandy	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Too sandy Depth to saturated zone	1.00 1.00
681: Cathro-----	45	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Tonkey-----	37	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
683B: Amasa-----	45	Very limited Seepage, bottom layer Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
Oldman-----	40	Very limited Depth to saturated zone Depth to thick cemented pan Large stones	1.00 1.00 0.96	Very limited Depth to cemented pan Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone Large stones Seepage	1.00 1.00 0.96 0.09
683C: Amasa-----	45	Very limited Seepage, bottom layer Too sandy Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 0.63	Very limited Too sandy Seepage Slope	1.00 1.00 0.63
Oldman-----	40	Very limited Depth to saturated zone Depth to thick cemented pan Large stones Slope	1.00 1.00 0.96 0.63	Very limited Depth to cemented pan Depth to saturated zone Seepage Slope	1.00 1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Large stones Slope Seepage	1.00 1.00 0.96 0.63 0.09
683D: Amasa-----	45	Very limited Slope Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00	Very limited Slope Too sandy Seepage	1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
683D: Oldman-----	40	Very limited Depth to saturated zone Slope Depth to thick cemented pan Large stones	 1.00 1.00 1.00 0.96	Very limited Depth to cemented pan Slope Depth to saturated zone Seepage	 1.00 1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone Large stones Seepage	 1.00 1.00 1.00 1.00 0.96 0.09
684B: Amasa-----	70	Very limited Seepage, bottom layer Too sandy	 1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	 1.00 1.00
684C: Amasa-----	78	Very limited Seepage, bottom layer Too sandy Slope	 1.00 1.00 0.63	Very limited Seepage Slope	 1.00 0.63	Very limited Too sandy Seepage Slope	 1.00 1.00 0.63
684D: Amasa-----	78	Very limited Slope Seepage, bottom layer Too sandy	 1.00 1.00 1.00	Very limited Slope Seepage	 1.00 1.00	Very limited Slope Too sandy Seepage	 1.00 1.00 1.00
686B: Annalake-----	40	Very limited Depth to saturated zone Too sandy	 1.00 1.00	Very limited Depth to saturated zone	 1.00	Very limited Too sandy Depth to saturated zone	 1.00 1.00
Robago-----	40	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone	 1.00
688: Cathro-----	60	Very limited Flooding Depth to saturated zone Ponding	 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
Leafriver-----	40	Very limited Flooding Depth to saturated zone Seepage, bottom layer Too sandy Ponding	 1.00 1.00 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage Ponding	 1.00 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
689B: Chabeneau-----	35	Very limited Depth to saturated zone Seepage, bottom layer Too sandy	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone Gravel content	1.00 1.00 1.00 1.00 0.79
Channing-----	30	Very limited Depth to saturated zone Seepage, bottom layer Too sandy	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage Gravel content	1.00 1.00 1.00 1.00 0.09
Gogebic-----	25	Very limited Depth to saturated zone Depth to thick cemented pan Too acid	1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00
691B: Dishno-----	35	Very limited Depth to saturated zone Depth to bedrock Seepage, bottom layer Too sandy Large stones	1.00 1.00 1.00 1.00 0.50 0.10	Very limited Depth to saturated zone Seepage Depth to bedrock	1.00 1.00 1.00 0.96	Somewhat limited Depth to bedrock Depth to saturated zone Seepage Too sandy Large stones	0.96 0.86 0.52 0.50 0.10
Tula-----	30	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
691D: Dishno-----	35	Very limited Depth to saturated zone Depth to bedrock Seepage, bottom layer Slope Too sandy	1.00 1.00 1.00 1.00 1.00 0.50	Very limited Depth to saturated zone Seepage Slope Depth to bedrock	1.00 1.00 1.00 1.00 0.96	Very limited Slope Depth to bedrock Depth to saturated zone Seepage Too sandy	1.00 0.96 0.86 0.52 0.50
Tula-----	30	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
693B: Chabeneau-----	50	Very limited Depth to saturated zone Seepage, bottom layer Too sandy	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone Gravel content	1.00 1.00 1.00 1.00 0.79
Annalake-----	40	Very limited Depth to saturated zone Too sandy	1.00 1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Too sandy Depth to saturated zone	1.00 1.00
694D: Annalake-----	40	Very limited Depth to saturated zone Too sandy Slope	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Slope	1.00 1.00 1.00	Very limited Too sandy Slope Depth to saturated zone	1.00 1.00 1.00
Stutts-----	35	Very limited Seepage, bottom layer Too sandy Slope	1.00 1.00 1.00 1.00	Very limited Seepage Slope	1.00 1.00	Very limited Too sandy Slope Seepage	1.00 1.00 0.50
Arnheim-----	25	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
5170: Minocqua-----	50	Very limited Depth to saturated zone Seepage, bottom layer Too sandy Ponding	1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage Ponding Gravel content	1.00 1.00 1.00 1.00 0.01
Pleine-----	30	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
Cathro-----	15	Very limited Depth to saturated zone Ponding	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
5171B: Tula-----	60	Very limited Depth to saturated zone Depth to thick cemented pan	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
5171B: Wormet-----	15	Very limited Depth to saturated zone Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage Gravel content	1.00 1.00 1.00 0.01
Gogebic, sandy substratum-----	15	Very limited Depth to saturated zone Depth to thick cemented pan Seepage, bottom layer Too acid	1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
5172B: Gogebic, sandy substratum-----	60	Very limited Depth to saturated zone Depth to thick cemented pan Seepage, bottom layer Too acid	1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00	Very limited Depth to cemented pan Depth to saturated zone	1.00 1.00
Pence-----	15	Very limited Seepage, bottom layer Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage Gravel content	1.00 1.00 0.05
Cathro-----	15	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
5172C: Gogebic, sandy substratum-----	60	Very limited Depth to saturated zone Depth to thick cemented pan Seepage, bottom layer Too acid Slope	1.00 1.00 1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 0.63
Pence-----	15	Very limited Seepage, bottom layer Too sandy Slope	1.00 1.00 0.63	Very limited Seepage Slope	1.00 0.63	Very limited Too sandy Seepage Slope Gravel content	1.00 1.00 0.63 0.05

Soil Survey of Gogebic County, Michigan

Table 13b.--Sanitary Facilities--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
5172C: Cathro-----	15	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
5172D: Gogebic, sandy substratum-----	60	Very limited Depth to saturated zone Slope Depth to thick cemented pan Seepage, bottom layer Too acid	1.00 1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00
Pence-----	15	Very limited Slope Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00	Very limited Slope Too sandy Seepage Gravel content	1.00 1.00 1.00 0.05
Cathro-----	15	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
5173D: Gogebic, sandy substratum-----	60	Very limited Depth to saturated zone Slope Depth to thick cemented pan Seepage, bottom layer Too acid	1.00 1.00 1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00	Very limited Depth to cemented pan Slope Depth to saturated zone	1.00 1.00 1.00
Pence-----	30	Very limited Slope Seepage, bottom layer Too sandy	1.00 1.00 1.00	Very limited Slope Seepage	1.00 1.00	Very limited Slope Too sandy Seepage	1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The greater the value, the greater the likelihood that the bottom layer or thickest layer of the soil is a source of sand or gravel. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
7:					
Histosols-----	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Aquents-----	40	Not rated		Not rated	
10:					
Witbeck-----	90	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.63	Thickest layer	0.00
12A:					
Monico-----	100	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.03
		Bottom layer	0.09	Thickest layer	0.03
13B:					
Argonne-----	83	Fair		Fair	
		Thickest layer	0.09	Thickest layer	0.04
		Bottom layer	0.63	Bottom layer	0.04
13C:					
Argonne-----	83	Fair		Fair	
		Thickest layer	0.09	Thickest layer	0.04
		Bottom layer	0.63	Bottom layer	0.04
13D:					
Argonne-----	86	Fair		Fair	
		Thickest layer	0.09	Thickest layer	0.04
		Bottom layer	0.63	Bottom layer	0.04
15B:					
Wabeno-----	100	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.03
15C:					
Wabeno-----	100	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.03
16A:					
Fence-----	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
17B:					
Lode-----	85	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.37
		Bottom layer	0.00	Bottom layer	0.64

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
17C:					
Lode-----	86	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.37
		Bottom layer	0.00	Bottom layer	0.64
20B:					
Pence-----	62	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.54
		Bottom layer	0.60	Bottom layer	0.93
Lode-----	30	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.37
		Bottom layer	0.00	Bottom layer	0.64
20C:					
Pence-----	86	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.54
		Bottom layer	0.60	Bottom layer	0.93
21:					
Minocqua-----	60	Fair		Fair	
		Thickest layer	0.62	Thickest layer	0.00
		Bottom layer	0.68	Bottom layer	0.50
Leafriver-----	30	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.27	Bottom layer	0.48
23B:					
Chabeneau-----	57	Fair		Fair	
		Bottom layer	0.70	Thickest layer	0.44
		Thickest layer	0.83	Bottom layer	0.46
Karlin-----	28	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.64
		Thickest layer	0.00	Bottom layer	0.86
Pence-----	15	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.54
		Bottom layer	0.60	Bottom layer	0.93
26B:					
Stambaugh-----	90	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.71	Bottom layer	0.64
27:					
Lupton-----	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Tawas-----	48	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.14	Bottom layer	0.14
28:					
Dawson-----	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.19

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
28:					
Greenwood-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Loxley-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
29B:					
Pence, very deep water table-----	85	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.54
		Bottom layer	0.75	Bottom layer	0.93
31:					
Evart-----	55	Fair		Fair	
		Thickest layer	0.37	Thickest layer	0.10
		Bottom layer	0.49	Bottom layer	0.49
Tawas-----	45	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.14	Bottom layer	0.14
32A:					
Net-----	100	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.08	Bottom layer	0.02
35A:					
Beechwood-----	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.02
36:					
Gay-----	58	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.03
		Thickest layer	0.00	Thickest layer	0.03
Pleine-----	30	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.04
37B:					
Gogebic-----	51	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Tula-----	31	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.07
Lupton-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
38B:					
Gogebic, sandy substratum-----	95	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.24

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
38C: Gogebic, sandy substratum-----	95	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.24
38D: Gogebic, sandy substratum-----	95	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.24
39B: Gogebic, sandy substratum-----	85	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.24
39C: Gogebic, sandy substratum-----	85	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.24
39D: Gogebic, sandy substratum-----	85	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.24
41: Lupton-----	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Pleine-----	23	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.04
Cathro-----	15	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
42: Ausable-----	70	Fair		Fair	
		Thickest layer	0.83	Bottom layer	0.61
		Bottom layer	0.83	Thickest layer	0.64
Tawas-----	25	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.14	Bottom layer	0.14
43B: Karlin-----	55	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.91
		Thickest layer	0.00	Thickest layer	0.91
Pence-----	40	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.54
		Bottom layer	0.60	Bottom layer	0.93

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
43C:					
Karlin-----	55	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.91
		Thickest layer	0.00	Thickest layer	0.91
Pence-----	40	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.54
		Bottom layer	0.60	Bottom layer	0.93
43D:					
Karlin-----	55	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.91
		Thickest layer	0.00	Thickest layer	0.91
Pence-----	40	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.54
		Bottom layer	0.60	Bottom layer	0.93
44B:					
Karlin-----	36	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.91
		Thickest layer	0.00	Thickest layer	0.91
Keweenaw-----	30	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.13
		Bottom layer	0.15	Thickest layer	0.15
Sarona, dense substratum-----	25	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.07
		Bottom layer	0.00	Bottom layer	0.10
44C:					
Karlin-----	36	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.91
		Thickest layer	0.00	Thickest layer	0.91
Keweenaw-----	30	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.13
		Bottom layer	0.15	Thickest layer	0.15
Sarona, dense substratum-----	25	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.07
		Bottom layer	0.00	Bottom layer	0.10
44D:					
Karlin-----	36	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.91
		Thickest layer	0.00	Thickest layer	0.91
Keweenaw-----	30	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.13
		Bottom layer	0.15	Thickest layer	0.15
Sarona, dense substratum-----	25	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.07
		Bottom layer	0.00	Bottom layer	0.10

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
46C:					
Amasa-----	54	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.68	Bottom layer	0.64
Karlin-----	40	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.91
		Thickest layer	0.00	Thickest layer	0.91
46D:					
Amasa-----	52	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.68	Bottom layer	0.64
Karlin-----	38	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.91
		Thickest layer	0.00	Thickest layer	0.91
46E:					
Amasa-----	52	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.68	Bottom layer	0.64
Karlin-----	38	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.91
		Thickest layer	0.00	Thickest layer	0.91
46F:					
Amasa-----	53	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.77	Bottom layer	0.64
Karlin-----	37	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.64
		Thickest layer	0.00	Bottom layer	0.86
47B:					
Karlin, very deep water table-----	41	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.91
		Thickest layer	0.00	Thickest layer	0.91
Noseum-----	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.45
		Thickest layer	0.00	Bottom layer	0.93
Gay-----	16	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.03
		Thickest layer	0.00	Thickest layer	0.03
48C:					
Karlin-----	75	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.91
		Thickest layer	0.00	Thickest layer	0.91
Michigamme-----	20	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
48F:					
Karlin-----	55	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.64
		Thickest layer	0.00	Bottom layer	0.86
Michigamme-----	30	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
49B:					
Pelissier-----	52	Fair		Fair	
		Bottom layer	0.57	Bottom layer	0.57
		Thickest layer	0.57	Thickest layer	0.57
Sarwet-----	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.03
		Thickest layer	0.00	Bottom layer	0.06
49C:					
Pelissier-----	50	Fair		Fair	
		Bottom layer	0.57	Bottom layer	0.57
		Thickest layer	0.57	Thickest layer	0.57
Sarwet-----	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.03
		Thickest layer	0.00	Bottom layer	0.06
49D:					
Pelissier-----	85	Fair		Fair	
		Bottom layer	0.57	Bottom layer	0.57
		Thickest layer	0.57	Thickest layer	0.57
52B:					
Pence-----	56	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.54
		Bottom layer	0.60	Bottom layer	0.93
Vilas-----	35	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.54
		Thickest layer	0.00	Thickest layer	0.64
52C:					
Pence-----	56	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.54
		Bottom layer	0.60	Bottom layer	0.93
Vilas-----	35	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.54
		Thickest layer	0.00	Thickest layer	0.64
53B:					
Manitowish-----	77	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.80
Croswell-----	22	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.86
		Thickest layer	0.00	Bottom layer	0.91

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
57B:					
Karlin-----	70	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.64
		Thickest layer	0.00	Bottom layer	0.86
Manitowish-----	20	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.80
57C:					
Karlin-----	75	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.64
		Thickest layer	0.00	Bottom layer	0.86
Manitowish-----	16	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.80
58B:					
Vilas, very deep water table-----	40	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.54
		Thickest layer	0.00	Thickest layer	0.64
Croswell-----	22	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.86
		Thickest layer	0.00	Bottom layer	0.91
Pence, very deep water table-----	20	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.54
		Bottom layer	0.60	Bottom layer	0.93
61:					
Tawas-----	60	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.14	Bottom layer	0.14
Kinross-----	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.58
		Thickest layer	0.00	Bottom layer	0.93
62B:					
Pelkie-----	100	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.36
		Thickest layer	0.00	Bottom layer	0.91
83:					
Bowstring-----	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.61
141D:					
Oldman-----	80	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.24	Bottom layer	0.02

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
141E: Oldman-----	80	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.24	Bottom layer	0.02
141F: Porkies-----	80	Fair		Fair	
		Thickest layer	0.21	Thickest layer	0.03
		Bottom layer	0.31	Bottom layer	0.11
214B: Amnicon-----	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Bergland-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
216B: Amnicon-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
217A: Cuttre-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
218: Bergland-----	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
219B: Payseor-----	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.10
		Thickest layer	0.00	Bottom layer	0.84
Froberg-----	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.04
222: Matchwood-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
225A: Cuttre-----	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Bergland-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
226B: Froberg-----	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.04

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
230B:					
Moquah-----	55	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.04
Arnheim-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
231:					
Matchwood-----	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Dorval-----	35	Fair		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.66	Bottom layer	0.03
233:					
Schaat Creek-----	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
239D:					
Miskoaki-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
277B:					
Kellogg, sandy substratum-----	50	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.24
Allendale-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
280B:					
Flintsteel-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
280C:					
Flintsteel-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
282B:					
Big Iron-----	70	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Flintsteel-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
283B:					
Loggerhead-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Noseum-----	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.45
		Thickest layer	0.00	Bottom layer	0.93
Ubly-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
283C:					
Loggerhead-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Noseum-----	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.45
		Thickest layer	0.00	Bottom layer	0.93
Ubly-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
284:					
Aquents-----	55	Not rated		Not rated	
Gull Point-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
285F:					
Rockland-----	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Arnheim-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
286A:					
Big Iron-----	65	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Belding-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
287:					
Trap Falls-----	55	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Tonkey-----	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.01
		Thickest layer	0.00	Bottom layer	0.01

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
289B: Amasa-----	95	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.68	Bottom layer	0.64
290B: Flintsteel-----	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
290C: Flintsteel-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
291B: Kalkaska-----	80	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.96
		Thickest layer	0.00	Thickest layer	0.96
291D: Kalkaska-----	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.96
		Thickest layer	0.00	Thickest layer	0.96
292B: Manido-----	45	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.40
		Thickest layer	0.00	Bottom layer	0.48
Richter-----	40	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.03
293A: Wainola-----	55	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.03
		Thickest layer	0.00	Thickest layer	0.36
Trap Falls-----	25	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
296B: Manido-----	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.40
		Thickest layer	0.00	Bottom layer	0.48
Fence-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Gogebic, sandy substratum-----	20	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.24

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
296D:					
Manido-----	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.40
		Thickest layer	0.00	Bottom layer	0.48
Sporley-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Gogebic, sandy substratum-----	20	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.24
299B:					
Zandi-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Amasa-----	30	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.77	Bottom layer	0.64
Flintsteel-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
299C:					
Zandi-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Amasa-----	30	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.77	Bottom layer	0.64
Flintsteel-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
301A:					
Moodig-----	86	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.10
302B:					
Manitowish-----	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.80
302C:					
Manitowish-----	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.80
303:					
Bowstring-----	50	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.63	Bottom layer	0.61

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
303: Arnheim-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
305B: Keweenaw-----	45	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.13
		Bottom layer	0.15	Thickest layer	0.15
Siskiwit-----	40	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.45
		Bottom layer	0.00	Bottom layer	0.91
305C: Keweenaw-----	45	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.13
		Bottom layer	0.15	Thickest layer	0.15
Siskiwit-----	40	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.45
		Bottom layer	0.00	Bottom layer	0.91
307: Lupton-----	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Cathro-----	45	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
309: Cathro-----	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
310B: Gogebic-----	92	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
310C: Gogebic-----	92	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
310D: Gogebic-----	92	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
310E: Schweitzer-----	90	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
311B:					
Tula-----	45	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.07
Gogebic-----	40	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
312A:					
Tula-----	35	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.07
Foxpaw-----	30	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.03
Gay-----	25	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.03
		Thickest layer	0.00	Thickest layer	0.03
316:					
Gay-----	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.03
		Thickest layer	0.00	Thickest layer	0.03
317B:					
Gogebic-----	95	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
317C:					
Gogebic-----	90	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
317D:					
Gogebic-----	88	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
319B:					
McMillan-----	45	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.19
		Thickest layer	0.00	Bottom layer	0.96
Noseum-----	40	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.45
		Bottom layer	0.00	Bottom layer	0.93
319C:					
McMillan-----	45	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.19
		Thickest layer	0.00	Bottom layer	0.96
Islandlake-----	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.84
		Thickest layer	0.00	Bottom layer	0.86

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
319D:					
McMillan-----	45	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.19
		Thickest layer	0.00	Bottom layer	0.96
Islandlake-----	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.84
		Thickest layer	0.00	Bottom layer	0.86
319E:					
McMillan-----	45	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.19
		Thickest layer	0.00	Bottom layer	0.96
Islandlake-----	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.84
		Thickest layer	0.00	Bottom layer	0.86
322B:					
Stutts-----	60	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.43
		Thickest layer	0.00	Bottom layer	0.46
Keweenaw-----	30	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.13
		Bottom layer	0.15	Thickest layer	0.15
322C:					
Stutts-----	60	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.43
		Thickest layer	0.00	Bottom layer	0.46
Keweenaw-----	30	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.13
		Bottom layer	0.15	Thickest layer	0.15
322D:					
Stutts-----	60	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.43
		Thickest layer	0.00	Bottom layer	0.46
Keweenaw-----	30	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.13
		Bottom layer	0.15	Thickest layer	0.15
323B:					
Keweenaw-----	50	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.13
		Bottom layer	0.15	Thickest layer	0.15
Kalkaska-----	40	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.96
		Thickest layer	0.00	Thickest layer	0.96
323C:					
Keweenaw-----	50	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.13
		Bottom layer	0.15	Thickest layer	0.15

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
323C: Kalkaska-----	40	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.96
		Thickest layer	0.00	Thickest layer	0.96
323D: Keweenaw-----	50	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.13
		Bottom layer	0.15	Thickest layer	0.15
Kalkaska-----	40	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.96
		Thickest layer	0.00	Thickest layer	0.96
325B: Siskiwit-----	55	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.45
		Bottom layer	0.00	Bottom layer	0.91
Gogebic-----	45	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
325C: Siskiwit-----	55	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.45
		Bottom layer	0.00	Bottom layer	0.91
Gogebic-----	45	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
327: Foxpaw-----	60	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.03
Sarwet-----	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.03
		Thickest layer	0.00	Bottom layer	0.06
328B: Annalake-----	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Karlin-----	36	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.91
		Thickest layer	0.00	Thickest layer	0.91
328C: Annalake-----	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Karlin-----	40	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.91
		Thickest layer	0.00	Thickest layer	0.91

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
328D:					
Karlin-----	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.64
		Thickest layer	0.00	Bottom layer	0.86
Zandi-----	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
329A:					
Tula-----	90	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.07
351B:					
Gogebic-----	85	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
351C:					
Gogebic-----	85	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
351D:					
Gogebic-----	85	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
351E:					
Schweitzer-----	85	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
351F:					
Schweitzer-----	90	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
353A:					
Tula-----	85	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.07
354B:					
Gogebic-----	90	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
354C:					
Gogebic-----	90	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
354D:					
Gogebic-----	85	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
354E: Schweitzer-----	85	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
354F: Schweitzer-----	90	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
363C: Talus-----	50	Not rated		Not rated	
Arcadian-----	35	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.57	Bottom layer	0.03
363D: Talus-----	46	Not rated		Not rated	
Arcadian-----	35	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.57	Bottom layer	0.03
363E: Talus-----	50	Not rated		Not rated	
Arcadian-----	35	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.57	Bottom layer	0.03
363F: Talus-----	50	Not rated		Not rated	
Arcadian-----	35	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.57	Bottom layer	0.03
364F: Talus-----	91	Not rated		Not rated	
365F: Rock outcrop-----	90	Not rated		Not rated	
369C: Dishno-----	35	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.15
		Thickest layer	0.00	Thickest layer	0.15
Gogebic-----	30	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Peshekee-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock outcrop-----	15	Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
369D:					
Dishno-----	35	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.15
		Thickest layer	0.00	Thickest layer	0.15
Gogebic-----	30	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Peshekee-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock outcrop-----	15	Not rated		Not rated	
369E:					
Michigamme-----	30	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Schweitzer-----	25	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Peshekee-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock outcrop-----	15	Not rated		Not rated	
369F:					
Michigamme-----	30	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Schweitzer-----	25	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Peshekee-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock outcrop-----	15	Not rated		Not rated	
370E:					
Peshekee-----	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock outcrop-----	40	Not rated		Not rated	
370F:					
Peshekee-----	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock outcrop-----	40	Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
375: Dumps and Pits, mine	95	Not rated		Not rated	
380: Beseman-----	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Greenwood-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
382: Cathro-----	45	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Arnheim-----	44	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
388: Gay-----	50	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.03
		Thickest layer	0.00	Thickest layer	0.03
Tula-----	40	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.07
398B: Tula-----	50	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.07
Gay-----	30	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.03
		Thickest layer	0.00	Thickest layer	0.03
Wakefield-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
418: Loxley-----	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Beseman-----	41	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
419: Pleine-----	45	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.04

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
419: Cathro-----	30	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Gay-----	25	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.03
		Thickest layer	0.00	Thickest layer	0.03
424: Gay-----	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.03
		Thickest layer	0.00	Thickest layer	0.03
425: Foxpaw-----	45	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.03
Gay-----	40	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.03
		Thickest layer	0.00	Thickest layer	0.03
428C: Gogebic-----	70	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Michigamme-----	25	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
428D: Gogebic-----	70	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Michigamme-----	25	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
429B: Gogebic-----	79	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Peshekee-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
429C: Gogebic-----	79	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Peshekee-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
429D: Gogebic-----	75	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Peshekee-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
429E: Schweitzer-----	60	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Peshekee-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
430B: Stutts-----	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.43
		Thickest layer	0.00	Bottom layer	0.46
430C: Stutts-----	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.43
		Thickest layer	0.00	Bottom layer	0.46
430D: Stutts-----	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.43
		Thickest layer	0.00	Bottom layer	0.46
430E: Stutts-----	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.43
		Thickest layer	0.00	Bottom layer	0.46
432C: Gogebic-----	68	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Michigamme-----	15	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Rock outcrop-----	15	Not rated		Not rated	
432D: Gogebic-----	68	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Michigamme-----	15	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Rock outcrop-----	15	Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
432E:					
Schweitzer-----	45	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Michigamme-----	20	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Rock outcrop-----	20	Not rated		Not rated	
432F:					
Schweitzer-----	45	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Michigamme-----	20	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Rock outcrop-----	20	Not rated		Not rated	
433B:					
McMillan-----	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.19
		Thickest layer	0.00	Bottom layer	0.96
433C:					
McMillan-----	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.19
		Thickest layer	0.00	Bottom layer	0.96
433D:					
McMillan-----	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.19
		Thickest layer	0.00	Bottom layer	0.96
435C:					
Kalkaska-----	45	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.96
		Thickest layer	0.00	Thickest layer	0.96
Waiska-----	40	Fair		Fair	
		Thickest layer	0.51	Thickest layer	0.51
		Bottom layer	0.90	Bottom layer	0.64
435D:					
Kalkaska-----	45	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.96
		Thickest layer	0.00	Thickest layer	0.96
Waiska-----	40	Fair		Fair	
		Thickest layer	0.51	Thickest layer	0.51
		Bottom layer	0.90	Bottom layer	0.64
435E:					
Kalkaska-----	45	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.96
		Thickest layer	0.00	Thickest layer	0.96

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
435E: Waiska-----	40	Fair		Fair	
		Thickest layer	0.51	Thickest layer	0.51
		Bottom layer	0.90	Bottom layer	0.64
437B: Manitowish-----	65	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.80
Channing-----	20	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.64	Bottom layer	0.82
448F: Rockland-----	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock outcrop-----	25	Not rated		Not rated	
449C: Flintsteel-----	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Minocqua-----	30	Fair		Fair	
		Thickest layer	0.62	Thickest layer	0.00
		Bottom layer	0.68	Bottom layer	0.50
452F: Rockland-----	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
460B: Belding-----	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Manido-----	25	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.40
		Thickest layer	0.00	Bottom layer	0.48
461B: Loggerhead-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
462C: Nonesuch-----	75	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Rock outcrop-----	15	Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
509:					
Cathro-----	45	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Minocqua-----	40	Fair		Fair	
		Thickest layer	0.62	Thickest layer	0.00
		Bottom layer	0.68	Bottom layer	0.50
511A:					
Gogebic-----	40	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Tula-----	30	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.07
Chabeneau-----	15	Fair		Fair	
		Bottom layer	0.70	Thickest layer	0.44
		Thickest layer	0.83	Bottom layer	0.46
519B:					
Gogebic-----	50	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Karlin-----	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.64
		Thickest layer	0.00	Bottom layer	0.86
519C:					
Gogebic-----	50	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Karlin-----	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.64
		Thickest layer	0.00	Bottom layer	0.86
519D:					
Gogebic-----	50	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Karlin-----	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.64
		Thickest layer	0.00	Bottom layer	0.86
522:					
Pits, sand and gravel-----	100	Not rated		Not rated	
523D:					
Gogebic, sandy substratum-----	53	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.24

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
523D: Karlin-----	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.64
		Thickest layer	0.00	Bottom layer	0.86
524C: Waiska-----	45	Fair		Fair	
		Thickest layer	0.51	Thickest layer	0.51
		Bottom layer	0.90	Bottom layer	0.64
Amasa-----	40	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.77	Bottom layer	0.64
524D: Waiska-----	45	Fair		Fair	
		Thickest layer	0.51	Thickest layer	0.51
		Bottom layer	0.90	Bottom layer	0.64
Amasa-----	40	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.77	Bottom layer	0.64
524E: Waiska-----	45	Fair		Fair	
		Thickest layer	0.51	Thickest layer	0.51
		Bottom layer	0.90	Bottom layer	0.64
Amasa-----	40	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.77	Bottom layer	0.64
527B: Wakefield-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
527C: Wakefield-----	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.01
527D: Wakefield-----	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.01
528B: Gogebic-----	48	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Annalake-----	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
528C: Gogebic-----	48	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
528C: Annalake-----	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
528D: Gogebic-----	48	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Annalake-----	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
551B: Gogebic-----	65	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Dishno-----	30	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.04
		Bottom layer	0.00	Bottom layer	0.14
566: Beach, rubbly-----	95	Not rated		Not rated	
576B: Flintsteel-----	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Loggerhead-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
576C: Flintsteel-----	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Loggerhead-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
576D: Flintsteel-----	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Loggerhead-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
577B: Loggerhead-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
577B:					
Chabeneau-----	30	Fair		Fair	
		Bottom layer	0.70	Thickest layer	0.44
		Thickest layer	0.83	Bottom layer	0.46
Arcadian-----	25	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.57	Bottom layer	0.03
577C:					
Loggerhead-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Chabeneau-----	30	Fair		Fair	
		Bottom layer	0.70	Thickest layer	0.44
		Thickest layer	0.83	Bottom layer	0.46
Arcadian-----	25	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.57	Bottom layer	0.03
577D:					
Loggerhead-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Chabeneau-----	30	Fair		Fair	
		Bottom layer	0.70	Thickest layer	0.44
		Thickest layer	0.83	Bottom layer	0.46
Arcadian-----	25	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.57	Bottom layer	0.03
578D:					
Arcadian-----	59	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.57	Bottom layer	0.03
Keweenaw-----	40	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.13
		Bottom layer	0.15	Thickest layer	0.15
625B:					
Fence-----	95	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
625C:					
Fence-----	98	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
626D:					
Sporley-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
626E: Sporley-----	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
648B: Annalake-----	93	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
648C: Annalake-----	93	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
650: Leafriver-----	90	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.27	Bottom layer	0.48
652B: Manido-----	52	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.40
		Thickest layer	0.00	Bottom layer	0.48
Annalake-----	24	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
656B: Stutts-----	60	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.43
		Thickest layer	0.00	Bottom layer	0.46
Zandi-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
656C: Stutts-----	60	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.43
		Thickest layer	0.00	Bottom layer	0.46
Zandi-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
656D: Stutts-----	60	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.43
		Thickest layer	0.00	Bottom layer	0.46
Zandi-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
680B: Tonkey-----	37	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.01
		Thickest layer	0.00	Thickest layer	0.01
Pleine-----	32	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.04
Annalake-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
681: Cathro-----	45	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Tonkey-----	37	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.01
		Thickest layer	0.00	Thickest layer	0.01
683B: Amasa-----	45	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.77	Bottom layer	0.64
Oldman-----	40	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.24	Bottom layer	0.09
683C: Amasa-----	45	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.77	Bottom layer	0.64
Oldman-----	40	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.24	Bottom layer	0.09
683D: Amasa-----	45	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.77	Bottom layer	0.64
Oldman-----	40	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.24	Bottom layer	0.09
684B: Amasa-----	70	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.68	Bottom layer	0.64
684C: Amasa-----	78	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.77	Bottom layer	0.64

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
684D: Amasa-----	78	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.77	Bottom layer	0.64
686B: Annalake-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Robago-----	40	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.03
		Thickest layer	0.00	Thickest layer	0.04
688: Cathro-----	60	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Leafriver-----	40	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.27	Bottom layer	0.48
689B: Chabeneau-----	35	Fair		Fair	
		Bottom layer	0.70	Thickest layer	0.44
		Thickest layer	0.83	Bottom layer	0.46
Channing-----	30	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.64	Bottom layer	0.82
Gogebic-----	25	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
691B: Dishno-----	35	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.04
		Bottom layer	0.00	Bottom layer	0.14
Tula-----	30	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.07
Rock outcrop-----	20	Not rated		Not rated	
691D: Dishno-----	35	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.04
		Bottom layer	0.00	Bottom layer	0.14
Tula-----	30	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.07
Rock outcrop-----	20	Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
693B:					
Chabeneau-----	50	Fair		Fair	
		Bottom layer	0.70	Thickest layer	0.44
		Thickest layer	0.83	Bottom layer	0.46
Annalake-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
694D:					
Annalake-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Stutts-----	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.43
		Thickest layer	0.00	Bottom layer	0.46
Arnheim-----	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
5170:					
Minocqua-----	50	Fair		Fair	
		Thickest layer	0.62	Thickest layer	0.00
		Bottom layer	0.68	Bottom layer	0.50
Pleine-----	30	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.04
Cathro-----	15	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
5171B:					
Tula-----	60	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.60	Bottom layer	0.05
Wormet-----	15	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.04
		Bottom layer	0.68	Bottom layer	0.80
Gogebic, sandy substratum-----	15	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.24
5172B:					
Gogebic, sandy substratum-----	60	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.24
Pence-----	15	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.54
		Bottom layer	0.60	Bottom layer	0.93
Cathro-----	15	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00

Soil Survey of Gogebic County, Michigan

Table 14a.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of gravel		Potential as source of sand	
		Rating class	Value	Rating class	Value
5172C: Gogebic, sandy substratum-----	60	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.24
Pence-----	15	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.54
		Bottom layer	0.60	Bottom layer	0.93
Cathro-----	15	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
5172D: Gogebic, sandy substratum-----	60	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.24
Pence-----	15	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.54
		Bottom layer	0.60	Bottom layer	0.93
Cathro-----	15	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
5173D: Gogebic, sandy substratum-----	60	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.24
Pence-----	30	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.54
		Bottom layer	0.60	Bottom layer	0.93

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7: Histosols-----	60	Fair Too acid	0.50	Poor Wetness	0.00	Poor Wetness Hard to reclaim (rock fragments) High content of organic matter Too acid	0.00 0.00 0.00 0.32
Aquents-----	40	Not rated		Not rated		Not rated	
10: Witbeck-----	90	Fair Low content of organic matter Stone content Too acid	0.12 0.26 0.84	Poor Wetness Stone content	0.00 0.00	Poor Wetness Rock fragments Hard to reclaim (rock fragments)	0.00 0.88 0.92
12A: Monico-----	100	Fair Too acid Low content of organic matter	0.05 0.12	Poor Wetness	0.00	Poor Wetness Hard to reclaim (rock fragments) Too acid Rock fragments	0.00 0.59 0.92 0.99
13B: Argonne-----	83	Fair Low content of organic matter Too acid Droughty Depth to cemented pan	0.12 0.16 0.44 0.46	Poor Wetness Depth to cemented pan	0.00 0.00	Poor Wetness Rock fragments Depth to cemented pan Too acid	0.00 0.00 0.46 0.98
13C: Argonne-----	83	Fair Low content of organic matter Too acid Droughty Depth to cemented pan	0.12 0.16 0.44 0.46	Poor Wetness Depth to cemented pan	0.00 0.00	Poor Wetness Rock fragments Slope Depth to cemented pan Too acid	0.00 0.00 0.37 0.46 0.98
13D: Argonne-----	86	Fair Low content of organic matter Too acid Droughty Depth to cemented pan	0.12 0.16 0.44 0.46	Poor Wetness Depth to cemented pan Slope	0.00 0.00 0.00	Poor Slope Wetness Rock fragments Depth to cemented pan Too acid	0.00 0.00 0.00 0.46 0.98

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
15B: Wabeno-----	100	Fair		Poor		Fair	
		Depth to cemented pan	0.08	Depth to cemented pan	0.00	Depth to cemented pan	0.08
		Too acid	0.54	Wetness	0.76	Wetness	0.76
		Droughty	0.79			Too acid	0.98
		Water erosion	0.99				
15C: Wabeno-----	100	Fair		Poor		Fair	
		Depth to cemented pan	0.08	Depth to cemented pan	0.00	Depth to cemented pan	0.08
		Too acid	0.54	Wetness	0.76	Slope	0.37
		Droughty	0.79			Wetness	0.76
		Water erosion	0.99			Too acid	0.98
16A: Fence-----	100	Fair		Fair		Fair	
		Low content of organic matter	0.12	Wetness	0.14	Wetness	0.14
		Too acid	0.61				
		Water erosion	0.90				
17B: Lode-----	85	Fair		Good		Fair	
		Low content of organic matter	0.12			Too acid	0.98
		Too acid	0.16				
		Water erosion	0.99				
17C: Lode-----	86	Fair		Good		Fair	
		Low content of organic matter	0.12			Slope	0.37
		Too acid	0.16			Too acid	0.98
		Water erosion	0.99				
20B: Pence-----	62	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Low content of organic matter	0.12			Hard to reclaim (rock fragments)	0.08
		Too acid	0.50				
		Droughty	0.68				
Lode-----	30	Fair		Good		Fair	
		Low content of organic matter	0.12			Too acid	0.98
		Too acid	0.16				
		Water erosion	0.99				
20C: Pence-----	86	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Low content of organic matter	0.12			Hard to reclaim (rock fragments)	0.08
		Too acid	0.50			Slope	0.37
		Droughty	0.68				

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21: Minocqua-----	60	Fair Low content of organic matter Too acid	 0.12 0.68	Poor Wetness	 0.00	Poor Wetness Rock fragments Hard to reclaim (rock fragments)	 0.00 0.12 0.68
Leafriver-----	30	Poor Wind erosion Too sandy Low content of organic matter Too acid	 0.00 0.00 0.12 0.97	Poor Wetness	 0.00	Poor Wetness Too sandy Rock fragments	 0.00 0.00 0.12
23B: Chabeneau-----	57	Poor Low content of organic matter Too acid	 0.00 0.03	Fair Wetness	 0.14	Poor Hard to reclaim (rock fragments) Wetness Rock fragments Too acid	 0.00 0.14 0.82 0.95
Karlin-----	28	Poor Too sandy Low content of organic matter Too acid	 0.00 0.12 0.50	Good		Poor Too sandy Too acid	 0.00 0.95
Pence-----	15	Poor Too sandy Low content of organic matter Too acid Droughty	 0.00 0.12 0.50 0.68	Good		Poor Too sandy Hard to reclaim (rock fragments)	 0.00 0.08
26B: Stambaugh-----	90	Fair Low content of organic matter Too acid Water erosion	 0.12 0.84 0.90	Good		Fair Hard to reclaim (rock fragments)	 0.08
27: Lupton-----	50	Poor Wind erosion Too acid	 0.00 0.95	Poor Wetness	 0.00	Poor Wetness High content of organic matter	 0.00 0.00
Tawas-----	48	Poor Wind erosion Too acid	 0.00 0.68	Poor Wetness	 0.00	Poor Wetness High content of organic matter Hard to reclaim (rock fragments)	 0.00 0.00 0.00

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
28:							
Dawson-----	40	Poor Too acid	0.00	Poor Wetness	0.00	Poor Wetness High content of organic matter Too acid	0.00 0.00 0.12
Greenwood-----	35	Poor Too acid	0.00	Poor Wetness	0.00	Poor Wetness High content of organic matter Too acid	0.00 0.00 0.12
Loxley-----	20	Poor Too acid	0.00	Poor Wetness	0.00	Poor Wetness High content of organic matter Too acid	0.00 0.00 0.00
29B:							
Pence, very deep water table-----	85	Poor Too sandy Low content of organic matter Too acid Droughty	0.00 0.12 0.50 0.71	Good		Poor Too sandy Hard to reclaim (rock fragments)	0.00 0.05
31:							
Evart-----	55	Poor Wind erosion Too sandy Low content of organic matter Too acid Droughty	0.00 0.04 0.12 0.50 0.51	Poor Wetness	0.00	Poor Wetness Rock fragments Too sandy Hard to reclaim (rock fragments) Too acid	0.00 0.00 0.04 0.24 0.95
Tawas-----	45	Poor Wind erosion Too acid	0.00 0.68	Poor Wetness	0.00	Poor Wetness High content of organic matter Hard to reclaim (rock fragments)	0.00 0.00 0.00
32A:							
Net-----	100	Poor Depth to cemented pan Droughty Too acid	0.00 0.09 0.50	Poor Wetness Depth to cemented pan	0.00 0.00	Poor Wetness Depth to cemented pan Rock fragments Too acid	0.00 0.00 0.03 0.76
35A:							
Beechwood-----	85	Fair Too acid Low content of organic matter Too sandy	0.03 0.12 0.98	Poor Wetness	0.00	Poor Wetness Rock fragments Too sandy	0.00 0.88 0.98

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
36: Gay-----	58	Fair Low content of organic matter Too acid	 0.12 0.50	Poor Wetness	 0.00	Poor Wetness	 0.00
Pleine-----	30	Fair Low content of organic matter Too acid	 0.12 0.50	Poor Wetness Cobble content Stone content	 0.00 0.92 0.97	Poor Wetness Rock fragments Hard to reclaim (rock fragments)	 0.00 0.91 0.95
37B: Gogebic-----	51	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan	 0.00 0.00	Poor Wetness Depth to cemented pan Rock fragments Too acid	 0.00 0.00 0.98 0.98
Tula-----	31	Fair Too acid Droughty Depth to cemented pan	 0.03 0.18 0.36	Poor Wetness Depth to cemented pan Cobble content	 0.00 0.00 0.95	Poor Wetness Rock fragments Depth to cemented pan	 0.00 0.01 0.36
Lupton-----	15	Poor Wind erosion Too acid	 0.00 0.95	Poor Wetness	 0.00	Poor Wetness High content of organic matter	 0.00 0.00
38B: Gogebic, sandy substratum-----	95	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan	 0.00 0.00	Poor Wetness Depth to cemented pan Rock fragments Too acid	 0.00 0.00 0.98 0.98
38C: Gogebic, sandy substratum-----	95	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan	 0.00 0.00	Poor Wetness Depth to cemented pan Slope Rock fragments Too acid	 0.00 0.00 0.37 0.98 0.98
38D: Gogebic, sandy substratum-----	95	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan Slope	 0.00 0.00 0.18	Poor Slope Wetness Depth to cemented pan Rock fragments Too acid	 0.00 0.00 0.00 0.98 0.98

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
39B: Gogebic, sandy substratum-----	85	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Wetness	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to cemented pan	0.00
		Droughty	0.11			Rock fragments	0.98
						Too acid	0.98
39C: Gogebic, sandy substratum-----	85	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Wetness	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to cemented pan	0.00
		Droughty	0.11			Slope	0.37
						Rock fragments	0.98
						Too acid	0.98
39D: Gogebic, sandy substratum-----	85	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Slope	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Wetness	0.00
		Droughty	0.11	Slope	0.18	Depth to cemented pan	0.00
						Rock fragments	0.98
						Too acid	0.98
41: Lupton-----	60	Poor		Poor		Poor	
		Wind erosion	0.00	Wetness	0.00	Wetness	0.00
		Too acid	0.95			High content of organic matter	0.00
Pleine-----	23	Fair		Poor		Poor	
		Low content of organic matter	0.12	Wetness	0.00	Wetness	0.00
		Too acid	0.50	Stone content	0.97	Rock fragments	0.91
						Hard to reclaim (rock fragments)	0.95
Cathro-----	15	Fair		Poor		Poor	
		Low content of organic matter	0.12	Wetness	0.00	Wetness	0.00
						High content of organic matter	0.00
						Hard to reclaim (rock fragments)	0.98
42: Ausable-----	70	Poor		Poor		Poor	
		Wind erosion	0.00	Wetness	0.00	Wetness	0.00
		Too sandy	0.00			Too sandy	0.00
		Too acid	0.03			Hard to reclaim (rock fragments)	0.00
		Low content of organic matter	0.12			Rock fragments	0.00

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
42: Tawas-----	25	Poor Wind erosion Too acid	 0.00 0.68	Poor Wetness	 0.00	Poor Wetness High content of organic matter Hard to reclaim (rock fragments)	 0.00 0.00 0.00
43B: Karlin-----	55	Poor Too sandy Wind erosion Low content of organic matter Too acid	 0.00 0.00 0.12 0.50	Good		Poor Too sandy Too acid	 0.00 0.95
Pence-----	40	Poor Too sandy Wind erosion Low content of organic matter Too acid Droughty	 0.00 0.00 0.12 0.50 0.68	Good		Poor Too sandy Hard to reclaim (rock fragments)	 0.00 0.08
43C: Karlin-----	55	Poor Too sandy Wind erosion Low content of organic matter Too acid	 0.00 0.00 0.12 0.50	Good		Poor Too sandy Slope Too acid	 0.00 0.37 0.95
Pence-----	40	Poor Too sandy Wind erosion Low content of organic matter Too acid Droughty	 0.00 0.00 0.12 0.50 0.68	Good		Poor Too sandy Hard to reclaim (rock fragments) Slope	 0.00 0.08 0.37
43D: Karlin-----	55	Poor Too sandy Wind erosion Low content of organic matter Too acid	 0.00 0.00 0.12 0.50	Fair Slope	 0.18	Poor Slope Too sandy Too acid	 0.00 0.00 0.95
Pence-----	40	Poor Too sandy Wind erosion Low content of organic matter Too acid Droughty	 0.00 0.00 0.12 0.50 0.68	Fair Slope	 0.18	Poor Slope Too sandy Hard to reclaim (rock fragments)	 0.00 0.00 0.08

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
44B:							
Karlin-----	36	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Too acid	0.95
		Low content of organic matter	0.12				
		Too acid	0.50				
Keweenaw-----	30	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Too acid	0.98
		Too acid	0.03			Rock fragments	0.99
Sarona, dense substratum-----	25	Fair		Good		Fair	
		Too acid	0.12			Too sandy	0.71
		Low content of organic matter	0.12				
		Too sandy	0.71				
44C:							
Karlin-----	36	Poor		Fair		Poor	
		Too sandy	0.00	Slope	0.98	Too sandy	0.00
		Wind erosion	0.00			Slope	0.00
		Low content of organic matter	0.12			Too acid	0.95
		Too acid	0.50				
Keweenaw-----	30	Poor		Fair		Poor	
		Too sandy	0.00	Slope	0.98	Too sandy	0.00
		Wind erosion	0.00			Slope	0.00
		Too acid	0.03			Too acid	0.98
						Rock fragments	0.99
Sarona, dense substratum-----	25	Fair		Good		Fair	
		Too acid	0.12			Too sandy	0.71
		Low content of organic matter	0.12			Slope	0.84
		Too sandy	0.71				
44D:							
Karlin-----	36	Poor		Poor		Poor	
		Too sandy	0.00	Slope	0.00	Slope	0.00
		Wind erosion	0.00			Too sandy	0.00
		Low content of organic matter	0.12			Too acid	0.95
		Too acid	0.50				
Keweenaw-----	30	Poor		Poor		Poor	
		Too sandy	0.00	Slope	0.00	Slope	0.00
		Wind erosion	0.00			Too sandy	0.00
		Too acid	0.03			Too acid	0.98
						Rock fragments	0.99
Sarona, dense substratum-----	25	Fair		Poor		Poor	
		Too acid	0.12	Slope	0.00	Slope	0.00
		Low content of organic matter	0.12			Too sandy	0.71
		Too sandy	0.71				

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
46C: Amasa-----	54	Poor Too acid Low content of organic matter Too sandy	 0.00 0.12 0.97	Good		Poor Hard to reclaim (rock fragments) Too acid Slope Rock fragments Too sandy	 0.00 0.41 0.84 0.94 0.97
Karlin-----	40	Poor Too sandy Low content of organic matter Too acid	 0.00 0.12 0.50	Good		Poor Too sandy Slope Too acid	 0.00 0.84 0.95
46D: Amasa-----	52	Poor Too acid Low content of organic matter Too sandy	 0.00 0.12 0.97	Poor Slope	0.00	Poor Slope Hard to reclaim (rock fragments) Too acid Rock fragments Too sandy	 0.00 0.00 0.41 0.94 0.97
Karlin-----	38	Poor Too sandy Low content of organic matter Too acid	 0.00 0.12 0.50	Poor Slope	0.00	Poor Slope Too sandy Too acid	 0.00 0.00 0.95
46E: Amasa-----	52	Poor Too acid Low content of organic matter Too sandy	 0.00 0.12 0.97	Poor Slope	0.00	Poor Slope Hard to reclaim (rock fragments) Too acid Rock fragments Too sandy	 0.00 0.00 0.41 0.94 0.97
Karlin-----	38	Poor Too sandy Low content of organic matter Too acid	 0.00 0.12 0.50	Poor Slope	0.00	Poor Slope Too sandy Too acid	 0.00 0.00 0.95
46F: Amasa-----	53	Poor Too acid Low content of organic matter	 0.00 0.12	Poor Slope	0.00	Poor Slope Hard to reclaim (rock fragments) Too acid Rock fragments	 0.00 0.00 0.41 0.94
Karlin-----	37	Poor Too sandy Low content of organic matter Too acid	 0.00 0.12 0.50	Poor Slope	0.00	Poor Slope Too sandy Too acid	 0.00 0.00 0.95

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
47B: Karlin, very deep water table-----	41	Poor Too sandy Low content of organic matter Too acid	0.00 0.12 0.50	Good		Poor Too sandy Too acid	0.00 0.95
Noseum-----	35	Poor Too sandy Too acid Low content of organic matter	0.00 0.03 0.12	Fair Wetness	0.53	Poor Too sandy Wetness	0.00 0.53
Gay-----	16	Fair Low content of organic matter Too acid	0.12 0.50	Poor Wetness	0.00	Poor Wetness	0.00
48C: Karlin-----	75	Poor Too sandy Low content of organic matter Too acid	0.00 0.12 0.50	Fair Slope	0.82	Poor Too sandy Slope Too acid	0.00 0.00 0.95
Michigamme-----	20	Fair Too acid Depth to bedrock Droughty	0.50 0.65 0.82	Poor Depth to bedrock	0.00	Fair Rock fragments Depth to bedrock Slope Too acid	0.23 0.65 0.84 0.98
48F: Karlin-----	55	Poor Too sandy Low content of organic matter Too acid	0.00 0.12 0.50	Poor Slope	0.00	Poor Slope Too sandy Too acid	0.00 0.00 0.95
Michigamme-----	30	Fair Too acid Depth to bedrock Droughty	0.50 0.65 0.82	Poor Slope Depth to bedrock	0.00 0.00	Poor Slope Rock fragments Depth to bedrock Too acid	0.00 0.23 0.65 0.98
49B: Pelissier-----	52	Poor Too sandy Low content of organic matter Droughty Too acid	0.00 0.02 0.45 0.50	Good		Poor Too sandy Rock fragments Hard to reclaim (rock fragments)	0.00 0.00 0.00
Sarwet-----	35	Poor Too acid Low content of organic matter Too sandy	0.00 0.12 0.78	Fair Wetness	0.14	Fair Wetness Too sandy	0.14 0.78

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
49C: Pelissier-----	50	Poor Too sandy Low content of organic matter Droughty Too acid	 0.00 0.02 0.45 0.50	Good		Poor Too sandy Rock fragments Slope Hard to reclaim (rock fragments)	 0.00 0.00 0.00 0.00
Sarwet-----	35	Poor Too acid Low content of organic matter Too sandy	 0.00 0.12 0.78	Fair Wetness	0.14	Poor Slope Wetness Too sandy	 0.00 0.14 0.78
49D: Pelissier-----	85	Poor Too sandy Low content of organic matter Droughty Too acid	 0.00 0.02 0.45 0.50	Poor Slope	0.00	Poor Slope Too sandy Rock fragments Hard to reclaim (rock fragments)	 0.00 0.00 0.00 0.00
52B: Pence-----	56	Poor Too sandy Low content of organic matter Too acid Droughty	 0.00 0.12 0.50 0.68	Good		Poor Too sandy Hard to reclaim (rock fragments)	 0.00 0.08
Vilas-----	35	Poor Too sandy Wind erosion Low content of organic matter Too acid Droughty	 0.00 0.00 0.12 0.50 0.72	Good		Poor Too sandy	 0.00
52C: Pence-----	56	Poor Too sandy Low content of organic matter Too acid Droughty	 0.00 0.12 0.50 0.68	Good		Poor Too sandy Hard to reclaim (rock fragments) Slope	 0.00 0.08 0.37
Vilas-----	35	Poor Too sandy Wind erosion Low content of organic matter Too acid Droughty	 0.00 0.00 0.12 0.50 0.72	Good		Poor Too sandy Slope	 0.00 0.37

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
53B: Manitowish-----	77	Poor Too acid Too sandy Low content of organic matter	 0.00 0.10 0.12	Fair Wetness	 0.53	Fair Too sandy Rock fragments Wetness Too acid Hard to reclaim (rock fragments)	 0.10 0.12 0.53 0.68 0.98
Croswell-----	22	Poor Too sandy Wind erosion Low content of organic matter Too acid Droughty	 0.00 0.00 0.12 0.50 0.89	Fair Wetness	 0.53	Poor Too sandy Too acid Wetness	 0.00 0.50 0.53
57B: Karlin-----	70	Poor Too sandy Wind erosion Low content of organic matter Too acid	 0.00 0.00 0.12 0.50	Good		Poor Too sandy Too acid	 0.00 0.95
Manitowish-----	20	Poor Too acid Too sandy Low content of organic matter	 0.00 0.10 0.12	Fair Wetness	 0.53	Fair Too sandy Rock fragments Wetness Too acid Hard to reclaim (rock fragments)	 0.10 0.12 0.53 0.68 0.98
57C: Karlin-----	75	Poor Too sandy Wind erosion Low content of organic matter Too acid	 0.00 0.00 0.12 0.50	Good		Poor Too sandy Slope Too acid	 0.00 0.37 0.95
Manitowish-----	16	Poor Too acid Too sandy Low content of organic matter	 0.00 0.10 0.12	Fair Wetness	 0.53	Fair Too sandy Rock fragments Slope Wetness Too acid Hard to reclaim (rock fragments)	 0.10 0.12 0.37 0.53 0.68 0.98
58B: Vilas, very deep water table-----	40	Poor Too sandy Wind erosion Low content of organic matter Too acid Droughty	 0.00 0.00 0.12 0.50 0.72	Good		Poor Too sandy	 0.00

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
58B: Croswell-----	22	Poor Wind erosion Too sandy Low content of organic matter Too acid Droughty	 0.00 0.00 0.12 0.50 0.89	Fair Wetness	 0.53	Poor Too sandy Too acid Wetness	 0.00 0.50 0.53
Pence, very deep water table-----	20	Poor Too sandy Low content of organic matter Too acid Droughty	 0.00 0.12 0.50 0.68	Good		Poor Too sandy Hard to reclaim (rock fragments)	 0.00 0.08
61: Tawas-----	60	Poor Wind erosion Too acid	 0.00 0.68	Poor Wetness	 0.00	Poor Wetness High content of organic matter Hard to reclaim (rock fragments)	 0.00 0.00 0.00
Kinross-----	30	Poor Too sandy Too acid Low content of organic matter	 0.00 0.01 0.12	Poor Wetness	 0.00	Poor Wetness Too sandy Too acid	 0.00 0.00 0.95
62B: Pelkie-----	100	Poor Too sandy Wind erosion Low content of organic matter Too acid Droughty	 0.00 0.00 0.12 0.50 0.88	Fair Wetness	 0.89	Poor Too sandy Wetness Too acid	 0.00 0.89 0.92
83: Bowstring-----	90	Poor Wind erosion Low content of organic matter Too acid	 0.00 0.12 0.84	Poor Wetness	 0.00	Poor Wetness High content of organic matter Hard to reclaim (rock fragments)	 0.00 0.00 0.92
141D: Oldman-----	80	Poor Too acid Droughty Depth to cemented pan Cobble content	 0.00 0.00 0.05 0.14	Poor Wetness Depth to cemented pan Cobble content Stone content	 0.00 0.00 0.00 0.42	Poor Wetness Rock fragments Depth to cemented pan Slope Too acid	 0.00 0.00 0.05 0.37 0.59

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
141E: Oldman-----	80	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Slope	0.00
		Droughty	0.00	Depth to cemented	0.00	Wetness	0.00
		Depth to cemented	0.05	pan		Rock fragments	0.00
		pan		Cobble content	0.00	Depth to cemented	0.05
		Cobble content	0.14	Stone content	0.42	pan	
				Slope	0.68	Too acid	0.59
141F: Porkies-----	80	Poor		Poor		Poor	
		Too acid	0.00	Slope	0.00	Slope	0.00
		Stone content	0.00	Stone content	0.00	Hard to reclaim	0.03
		Droughty	0.89	Depth to cemented	0.58	(rock fragments)	
				pan		Rock fragments	0.18
						Too acid	0.99
214B: Amnicon-----	60	Poor		Poor		Poor	
		Too clayey	0.00	Wetness	0.00	Too clayey	0.00
		Too acid	0.32	Low strength	0.00	Wetness	0.00
		Low content of	0.32	Shrink-swell	0.00		
		organic matter					
		Water erosion	0.90				
Bergland-----	30	Poor		Poor		Poor	
		Too clayey	0.00	Wetness	0.00	Too clayey	0.00
		Low content of	0.02	Low strength	0.00	Wetness	0.00
		organic matter		Shrink-swell	0.00		
		Too acid	0.05				
216B: Amnicon-----	85	Poor		Poor		Poor	
		Too clayey	0.00	Wetness	0.00	Too clayey	0.00
		Too acid	0.32	Low strength	0.00	Wetness	0.00
		Low content of	0.32	Shrink-swell	0.00		
		organic matter					
		Water erosion	0.90				
217A: Cuttre-----	85	Poor		Poor		Poor	
		Too clayey	0.00	Wetness	0.00	Too clayey	0.00
		Low content of	0.12	Low strength	0.00	Wetness	0.00
		organic matter		Shrink-swell	0.20		
		Too acid	0.54				
		Carbonate content	0.97				
		Water erosion	0.99				
218: Bergland-----	80	Poor		Poor		Poor	
		Too clayey	0.00	Wetness	0.00	Too clayey	0.00
		Low content of	0.02	Low strength	0.00	Wetness	0.00
		organic matter		Shrink-swell	0.00		
		Too acid	0.05				

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
219B: Payseor-----	50	Fair Low content of organic matter Too acid Too sandy	 0.02 0.54 0.86	Poor Wetness Shrink-swell	 0.00 0.67	Poor Wetness Too sandy	 0.00 0.86
Froberg-----	40	Poor Too clayey Low content of organic matter Too acid Water erosion	 0.00 0.02 0.80 0.99	Fair Wetness Shrink-swell	 0.14 0.74	Poor Too clayey Wetness	 0.00 0.14
222: Matchwood-----	85	Poor Too clayey Too acid Low content of organic matter	 0.00 0.03 0.12	Poor Wetness Low strength Shrink-swell	 0.00 0.00 0.36	Poor Too clayey Wetness	 0.00 0.00
225A: Cuttre-----	50	Poor Too clayey Low content of organic matter Too acid Carbonate content Water erosion	 0.00 0.12 0.54 0.97 0.99	Poor Wetness Low strength Shrink-swell	 0.00 0.00 0.20	Poor Too clayey Wetness	 0.00 0.00
Bergland-----	40	Poor Too clayey Low content of organic matter Too acid	 0.00 0.02 0.05	Poor Wetness Low strength Shrink-swell	 0.00 0.00 0.00	Poor Too clayey Wetness	 0.00 0.00
226B: Froberg-----	85	Poor Too clayey Low content of organic matter Too acid Water erosion	 0.00 0.02 0.80 0.99	Fair Wetness Shrink-swell	 0.14 0.74	Poor Too clayey Wetness	 0.00 0.14
230B: Moquah-----	55	Fair Too acid Low content of organic matter Too sandy	 0.46 0.50 0.86	Good		Fair Too sandy	 0.86
Arnheim-----	30	Fair Low content of organic matter Too acid Water erosion	 0.12 0.50 0.90	Poor Wetness	 0.00	Poor Wetness	 0.00

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
231: Matchwood-----	45	Poor Too clayey Too acid Low content of organic matter	 0.00 0.03 0.12	Poor Wetness Low strength Shrink-swell	 0.00 0.00 0.36	Poor Too clayey Wetness	 0.00 0.00
Dorval-----	35	Fair Too acid Low content of organic matter	 0.03 0.12	Poor Wetness	 0.00	Poor Wetness Rock fragments High content of organic matter	 0.00 0.00 0.00
233: Schaat Creek-----	90	Fair Low content of organic matter Too acid Water erosion Too clayey Carbonate content	 0.12 0.39 0.90 0.92 0.92	Poor Wetness Shrink-swell	 0.00 0.98	Poor Wetness Too clayey	 0.00 0.53
239D: Miskoaki-----	85	Poor Too clayey Low content of organic matter Too acid Water erosion	 0.00 0.50 0.68 0.90	Poor Low strength Shrink-swell Slope	 0.00 0.00 0.50	Poor Slope Too clayey	 0.00 0.00
277B: Kellogg, sandy substratum-----	50	Poor Too sandy Low content of organic matter Too acid Water erosion	 0.00 0.12 0.54 0.90	Poor Low strength Wetness	 0.00 0.14	Poor Too sandy Wetness Hard to reclaim (rock fragments) Rock fragments	 0.00 0.14 0.92 0.98
Allendale-----	35	Poor Too clayey Low content of organic matter Too acid	 0.00 0.12 0.50	Poor Wetness Low strength Shrink-swell	 0.00 0.00 0.98	Poor Wetness Too clayey Too acid	 0.00 0.00 0.82
280B: Flintsteel-----	85	Poor Too acid Low content of organic matter	 0.00 0.12	Poor Wetness Low strength	 0.00 0.78	Poor Wetness	 0.00
280C: Flintsteel-----	85	Poor Too acid Low content of organic matter	 0.00 0.12	Poor Wetness Low strength	 0.00 0.78	Poor Wetness Slope	 0.00 0.84

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
282B:							
Big Iron-----	70	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.12				
Flintsteel-----	20	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.12	Low strength	0.78		
283B:							
Loggerhead-----	40	Fair		Poor		Poor	
		Too acid	0.03	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.50	Low strength	0.22	Too acid	0.82
						Rock fragments	0.92
Noseum-----	30	Poor		Fair		Poor	
		Too sandy	0.00	Wetness	0.53	Too sandy	0.00
		Too acid	0.03			Wetness	0.53
		Low content of organic matter	0.12				
Ubly-----	20	Poor		Good		Fair	
		Too acid	0.00			Too acid	0.98
		Low content of organic matter	0.08				
283C:							
Loggerhead-----	40	Fair		Poor		Poor	
		Too acid	0.03	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.50	Low strength	0.22	Too acid	0.82
						Slope	0.84
						Rock fragments	0.92
Noseum-----	30	Poor		Fair		Poor	
		Too sandy	0.00	Wetness	0.53	Too sandy	0.00
		Too acid	0.03			Wetness	0.53
		Low content of organic matter	0.12				
Ubly-----	20	Poor		Good		Fair	
		Too acid	0.00			Too acid	0.98
		Low content of organic matter	0.08				
284:							
Aquents-----	55	Poor		Poor		Poor	
		Low content of organic matter	0.00	Wetness	0.00	Wetness	0.00
Gull Point-----	40	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Wetness	0.00
		Too alkaline	0.00	Low strength	0.00		
				Shrink-swell	0.89		

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
285F: Rockland-----	70	Fair Low content of organic matter Too acid	 0.12 0.50	Poor Slope	 0.00	Poor Slope	 0.00
Arnheim-----	15	Fair Low content of organic matter Too acid Water erosion	 0.12 0.50 0.90	Poor Wetness	 0.00	Poor Wetness	 0.00
286A: Big Iron-----	65	Poor Too acid Low content of organic matter	 0.00 0.12	Poor Wetness	 0.00	Poor Wetness	 0.00
Belding-----	20	Fair Low content of organic matter Too acid Carbonate content Droughty	 0.12 0.50 0.97 0.99	Poor Wetness Low strength	 0.00 0.00	Poor Wetness	 0.00
287: Trap Falls-----	55	Poor Too acid Low content of organic matter Too clayey	 0.00 0.12 0.98	Poor Wetness	 0.00	Poor Wetness Too clayey	 0.00 0.57
Tonkey-----	35	Fair Low content of organic matter Too acid	 0.12 0.68	Poor Wetness	 0.00	Poor Wetness	 0.00
289B: Amasa-----	95	Poor Too acid Low content of organic matter Too sandy	 0.00 0.12 0.97	Good		Poor Hard to reclaim (rock fragments) Too acid Rock fragments Too sandy	 0.00 0.41 0.94 0.97
290B: Flintsteel-----	80	Poor Too acid Low content of organic matter	 0.00 0.12	Poor Wetness Low strength	 0.00 0.78	Poor Wetness	 0.00
290C: Flintsteel-----	85	Poor Too acid Low content of organic matter	 0.00 0.12	Poor Wetness Low strength	 0.00 0.78	Poor Wetness Slope	 0.00 0.37

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
291B: Kalkaska-----	80	Poor Too sandy Wind erosion Low content of organic matter Too acid Droughty	 0.00 0.00 0.12 0.50 0.99	Good		Poor Too sandy Too acid	 0.00 0.98
291D: Kalkaska-----	85	Poor Too sandy Wind erosion Low content of organic matter Too acid Droughty	 0.00 0.00 0.12 0.50 0.99	Good		Poor Too sandy Slope Too acid	 0.00 0.37 0.98
292B: Manido-----	45	Poor Too sandy Wind erosion Too acid Low content of organic matter	 0.00 0.00 0.00 0.12	Fair Wetness	0.53	Poor Too sandy Too acid Wetness	 0.00 0.12 0.53
Richter-----	40	Fair Low content of organic matter Too sandy Too acid	 0.12 0.20 0.50	Poor Wetness	0.00	Poor Wetness Too sandy	 0.00 0.20
293A: Wainola-----	55	Poor Wind erosion Too sandy Low content of organic matter Too acid	 0.00 0.00 0.12 0.50	Poor Wetness	0.00	Poor Wetness Too sandy Too acid	 0.00 0.00 0.88
Trap Falls-----	25	Poor Too acid Low content of organic matter Too clayey	 0.00 0.12 0.98	Poor Wetness	0.00	Poor Wetness Too clayey	 0.00 0.57
296B: Manido-----	35	Poor Too sandy Wind erosion Too acid Low content of organic matter	 0.00 0.00 0.00 0.12	Fair Wetness	0.53	Poor Too sandy Too acid Wetness	 0.00 0.12 0.53
Fence-----	30	Fair Low content of organic matter Too acid Water erosion	 0.12 0.50 0.90	Fair Wetness	0.14	Fair Wetness	 0.14

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
296B: Gogebic, sandy substratum-----	20	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Wetness	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to cemented pan	0.00
		Droughty	0.11			Rock fragments	0.98
						Too acid	0.98
296D: Manido-----	35	Poor		Poor		Poor	
		Too sandy	0.00	Slope	0.00	Slope	0.00
		Wind erosion	0.00	Wetness	0.53	Too sandy	0.00
		Too acid	0.00			Too acid	0.12
		Low content of organic matter	0.12			Wetness	0.53
Sporley-----	30	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Too acid	0.50	Low strength	0.78		
		Water erosion	0.90				
Gogebic, sandy substratum-----	20	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Slope	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Wetness	0.00
		Droughty	0.11	Slope	0.00	Depth to cemented pan	0.00
						Rock fragments	0.98
						Too acid	0.98
299B: Zandi-----	40	Poor		Good		Fair	
		Wind erosion	0.00			Too acid	0.92
		Too acid	0.08				
		Low content of organic matter	0.88				
Amasa-----	30	Poor		Good		Poor	
		Too acid	0.00			Hard to reclaim (rock fragments)	0.00
		Low content of organic matter	0.12			Too acid	0.41
						Rock fragments	0.94
Flintsteel-----	20	Poor		Fair		Fair	
		Too acid	0.00	Wetness	0.14	Wetness	0.14
		Low content of organic matter	0.12	Low strength	0.78		
299C: Zandi-----	40	Poor		Good		Fair	
		Wind erosion	0.00			Slope	0.37
		Too acid	0.08			Too acid	0.92
		Low content of organic matter	0.88				

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
299C: Amasa-----	30	Poor Too acid Low content of organic matter	 0.00 0.12	Good		Poor Hard to reclaim (rock fragments) Slope Too acid Rock fragments	 0.00 0.37 0.41 0.94
Flintsteel-----	20	Poor Too acid Low content of organic matter	 0.00 0.12	Fair Wetness Low strength	 0.14 0.78	Fair Wetness Slope	 0.14 0.37
301A: Moodig-----	86	Fair Low content of organic matter Too acid	 0.12 0.68	Poor Wetness	 0.00	Poor Wetness Hard to reclaim (rock fragments)	 0.00 0.99
302B: Manitowish-----	85	Poor Too acid Too sandy Low content of organic matter	 0.00 0.10 0.12	Fair Wetness	 0.53	Fair Too sandy Rock fragments Wetness Too acid Hard to reclaim (rock fragments)	 0.10 0.12 0.53 0.68 0.98
302C: Manitowish-----	85	Poor Too acid Too sandy Low content of organic matter	 0.00 0.10 0.12	Fair Wetness	 0.53	Fair Too sandy Rock fragments Slope Wetness Too acid Hard to reclaim (rock fragments)	 0.10 0.12 0.37 0.53 0.68 0.98
303: Bowstring-----	50	Poor Wind erosion Low content of organic matter Too acid	 0.00 0.12 0.99	Poor Wetness	 0.00	Poor Wetness High content of organic matter Hard to reclaim (rock fragments)	 0.00 0.00 0.92
Arnheim-----	40	Fair Low content of organic matter Too acid Water erosion	 0.12 0.50 0.90	Poor Wetness	 0.00	Poor Wetness	 0.00
305B: Keweenaw-----	45	Poor Too sandy Wind erosion Too acid	 0.00 0.00 0.03	Good		Poor Too sandy Too acid Rock fragments	 0.00 0.98 0.99

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
305B: Siskiwit-----	40	Poor		Fair		Fair	
		Wind erosion	0.00	Wetness	0.53	Too sandy	0.20
		Too acid	0.03			Wetness	0.53
		Too sandy	0.20				
		Low content of organic matter	0.88				
305C: Keweenaw-----	45	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Slope	0.84
		Too acid	0.03			Too acid	0.98
						Rock fragments	0.99
Siskiwit-----	40	Poor		Fair		Fair	
		Wind erosion	0.00	Wetness	0.53	Too sandy	0.20
		Too acid	0.03			Wetness	0.53
		Too sandy	0.20				
		Low content of organic matter	0.88				
307: Lupton-----	45	Poor		Poor		Poor	
		Wind erosion	0.00	Wetness	0.00	Wetness	0.00
		Too acid	0.95			High content of organic matter	0.00
Cathro-----	45	Fair		Poor		Poor	
		Low content of organic matter	0.12	Wetness	0.00	Wetness	0.00
						High content of organic matter	0.00
						Hard to reclaim (rock fragments)	0.98
309: Cathro-----	85	Fair		Poor		Poor	
		Low content of organic matter	0.12	Wetness	0.00	Wetness	0.00
						High content of organic matter	0.00
						Hard to reclaim (rock fragments)	0.98
310B: Gogebic-----	92	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Wetness	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to cemented pan	0.00
		Droughty	0.11			Rock fragments	0.98
						Too acid	0.98
310C: Gogebic-----	92	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Wetness	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to cemented pan	0.00
		Droughty	0.11			Slope	0.37
						Rock fragments	0.98
						Too acid	0.98

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
310D: Gogebic-----	92	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Slope	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Wetness	0.00
		Droughty	0.11	Slope	0.00	Depth to cemented pan	0.00
						Rock fragments	0.98
						Too acid	0.98
310E: Schweitzer-----	90	Fair		Poor		Poor	
		Depth to cemented pan	0.01	Slope	0.00	Slope	0.00
		Too acid	0.08	Depth to cemented pan	0.00	Rock fragments	0.00
		Droughty	0.17	Cobble content	0.14	Depth to cemented pan	0.01
		Stone content	0.68	Stone content	0.68	Too acid	0.98
		Cobble content	0.99				
311B: Tula-----	45	Fair		Poor		Poor	
		Too acid	0.03	Wetness	0.00	Wetness	0.00
		Droughty	0.18	Depth to cemented pan	0.00	Rock fragments	0.01
		Depth to cemented pan	0.36	Cobble content	0.95	Depth to cemented pan	0.36
Gogebic-----	40	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Wetness	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to cemented pan	0.00
		Droughty	0.11			Rock fragments	0.98
						Too acid	0.98
312A: Tula-----	35	Fair		Poor		Poor	
		Too acid	0.03	Wetness	0.00	Wetness	0.00
		Droughty	0.18	Depth to cemented pan	0.00	Rock fragments	0.01
		Depth to cemented pan	0.36	Cobble content	0.95	Depth to cemented pan	0.36
Foxpaw-----	30	Fair		Poor		Poor	
		Low content of organic matter	0.12	Wetness	0.00	Wetness	0.00
		Too acid	0.50			Rock fragments	0.88
						Too acid	0.95
						Hard to reclaim (rock fragments)	0.99
Gay-----	25	Fair		Poor		Poor	
		Low content of organic matter	0.12	Wetness	0.00	Wetness	0.00
		Too acid	0.50				
316: Gay-----	85	Fair		Poor		Poor	
		Low content of organic matter	0.12	Wetness	0.00	Wetness	0.00
		Too acid	0.50				

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
317B: Gogebic-----	95	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan	 0.00 0.00 	Poor Wetness Depth to cemented pan Rock fragments Too acid	 0.00 0.00 0.98 0.98
317C: Gogebic-----	90	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan	 0.00 0.00 	Poor Wetness Depth to cemented pan Slope Rock fragments Too acid	 0.00 0.00 0.37 0.98 0.98
317D: Gogebic-----	88	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan Slope	 0.00 0.00 0.00	Poor Slope Wetness Depth to cemented pan Rock fragments Too acid	 0.00 0.00 0.00 0.98 0.98
319B: McMillan-----	45	Poor Too sandy Too acid Low content of organic matter Droughty	 0.00 0.08 0.08 0.58	Good		Poor Too sandy	 0.00
Noseum-----	40	Poor Too sandy Too acid Low content of organic matter	 0.00 0.03 0.12	Fair Wetness	 0.53	Poor Too sandy Wetness	 0.00 0.53
319C: McMillan-----	45	Poor Too sandy Too acid Low content of organic matter Droughty	 0.00 0.08 0.08 0.58	Good		Poor Too sandy Slope	 0.00 0.37
Islandlake-----	40	Poor Too sandy Wind erosion Too acid	 0.00 0.00 0.03	Good		Poor Too sandy Slope Too acid	 0.00 0.37 0.92
319D: McMillan-----	45	Poor Too sandy Too acid Low content of organic matter Droughty	 0.00 0.08 0.08 0.58	Poor Slope	 0.00	Poor Slope Too sandy	 0.00 0.00

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
319D: Islandlake-----	40	Poor		Poor		Poor	
		Too sandy	0.00	Slope	0.00	Slope	0.00
		Wind erosion	0.00			Too sandy	0.00
		Too acid	0.03			Too acid	0.92
319E: McMillan-----	45	Poor		Poor		Poor	
		Too sandy	0.00	Slope	0.00	Slope	0.00
		Too acid	0.08			Too sandy	0.00
		Low content of organic matter	0.08				
		Droughty	0.58				
Islandlake-----	40	Poor		Poor		Poor	
		Too sandy	0.00	Slope	0.00	Slope	0.00
		Wind erosion	0.00			Too sandy	0.00
		Too acid	0.03			Too acid	0.92
322B: Stutts-----	60	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00				
		Low content of organic matter	0.06				
		Too acid	0.50				
		Droughty	0.99				
Keweenaw-----	30	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Too acid	0.98
		Too acid	0.03			Rock fragments	0.99
322C: Stutts-----	60	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Slope	0.37
		Low content of organic matter	0.06				
		Too acid	0.50				
		Droughty	0.99				
Keweenaw-----	30	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Slope	0.37
		Too acid	0.03			Too acid	0.98
						Rock fragments	0.99
322D: Stutts-----	60	Poor		Poor		Poor	
		Too sandy	0.00	Slope	0.00	Slope	0.00
		Wind erosion	0.00			Too sandy	0.00
		Low content of organic matter	0.06				
		Too acid	0.50				
		Droughty	0.99				

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
322D: Keweenaw-----	30	Poor		Poor		Poor	
		Too sandy	0.00	Slope	0.00	Slope	0.00
		Wind erosion	0.00			Too sandy	0.00
		Too acid	0.03			Too acid	0.98
						Rock fragments	0.99
323B: Keweenaw-----	50	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Too acid	0.98
		Too acid	0.08			Rock fragments	0.99
Kalkaska-----	40	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Too acid	0.98
		Low content of organic matter	0.12				
		Too acid	0.50				
		Droughty	0.99				
323C: Keweenaw-----	50	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Slope	0.37
		Too acid	0.08			Too acid	0.98
						Rock fragments	0.99
Kalkaska-----	40	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Slope	0.37
		Low content of organic matter	0.12			Too acid	0.98
		Too acid	0.50				
		Droughty	0.99				
323D: Keweenaw-----	50	Poor		Poor		Poor	
		Too sandy	0.00	Slope	0.00	Slope	0.00
		Wind erosion	0.00			Too sandy	0.00
		Too acid	0.08			Too acid	0.98
						Rock fragments	0.99
Kalkaska-----	40	Poor		Poor		Poor	
		Too sandy	0.00	Slope	0.00	Slope	0.00
		Wind erosion	0.00			Too sandy	0.00
		Low content of organic matter	0.12			Too acid	0.98
		Too acid	0.50				
		Droughty	0.99				
325B: Siskiwit-----	55	Poor		Fair		Fair	
		Wind erosion	0.00	Wetness	0.53	Too sandy	0.20
		Too acid	0.03			Wetness	0.53
		Too sandy	0.20				
		Low content of organic matter	0.88				

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
325B: Gogebic-----	45	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Wetness	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to cemented pan	0.00
		Droughty	0.11			Rock fragments	0.98
						Too acid	0.98
325C: Siskiwit-----	55	Poor		Fair		Fair	
		Wind erosion	0.00	Wetness	0.53	Too sandy	0.20
		Too acid	0.03			Wetness	0.53
		Too sandy	0.20				
		Low content of organic matter	0.88				
Gogebic-----	45	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Wetness	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to cemented pan	0.00
		Droughty	0.11			Slope	0.96
						Rock fragments	0.98
						Too acid	0.98
327: Foxpaw-----	60	Fair		Poor		Poor	
		Low content of organic matter	0.12	Wetness	0.00	Wetness	0.00
		Too acid	0.50			Rock fragments	0.88
						Too acid	0.95
						Hard to reclaim (rock fragments)	0.99
Sarwet-----	40	Poor		Fair		Fair	
		Too acid	0.00	Wetness	0.14	Wetness	0.14
		Low content of organic matter	0.12			Too sandy	0.78
		Too sandy	0.78				
328B: Annalake-----	50	Fair		Fair		Fair	
		Too acid	0.08	Wetness	0.14	Wetness	0.14
		Low content of organic matter	0.12			Too sandy	0.20
		Too sandy	0.20			Too acid	0.98
Karlin-----	36	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Low content of organic matter	0.12			Too acid	0.95
		Too acid	0.50				
328C: Annalake-----	50	Fair		Fair		Fair	
		Too acid	0.08	Wetness	0.14	Wetness	0.14
		Low content of organic matter	0.12			Too sandy	0.20
		Too sandy	0.20			Slope	0.37
						Too acid	0.98

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
328C: Karlin-----	40	Poor Too sandy Low content of organic matter Too acid	 0.00 0.12 0.50	Good		Poor Too sandy Slope Too acid	 0.00 0.37 0.95
328D: Karlin-----	50	Poor Too sandy Low content of organic matter Too acid	 0.00 0.12 0.50	Fair Slope	 0.18	Poor Slope Too sandy Too acid	 0.00 0.00 0.95
Zandi-----	45	Poor Wind erosion Too acid Low content of organic matter	 0.00 0.08 0.88	Fair Slope	 0.18	Poor Slope Too acid	 0.00 0.92
329A: Tula-----	90	Poor Too acid Droughty Depth to cemented pan	 0.00 0.20 0.36	Poor Wetness Depth to cemented pan Cobble content	 0.00 0.00 0.99	Poor Wetness Rock fragments Depth to cemented pan	 0.00 0.13 0.36
351B: Gogebic-----	85	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan	 0.00 0.00	Poor Wetness Depth to cemented pan Rock fragments Too acid	 0.00 0.00 0.98 0.98
351C: Gogebic-----	85	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan	 0.00 0.00	Poor Wetness Depth to cemented pan Slope Rock fragments Too acid	 0.00 0.00 0.37 0.98 0.98
351D: Gogebic-----	85	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan Slope	 0.00 0.00 0.00	Poor Slope Wetness Depth to cemented pan Rock fragments Too acid	 0.00 0.00 0.00 0.98 0.98
351E: Schweitzer-----	85	Poor Too acid Depth to cemented pan Droughty Stone content	 0.00 0.01 0.15 0.76	Poor Slope Depth to cemented pan Cobble content Stone content	 0.00 0.00 0.17 0.72	Poor Slope Rock fragments Depth to cemented pan Too acid	 0.00 0.00 0.01 0.98

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
351F: Schweitzer-----	90	Poor		Poor		Poor	
		Too acid	0.00	Slope	0.00	Slope	0.00
		Depth to cemented pan	0.01	Depth to cemented pan	0.00	Rock fragments	0.00
		Droughty	0.15	Cobble content	0.17	Depth to cemented pan	0.01
		Stone content	0.76	Stone content	0.72	Too acid	0.98
353A: Tula-----	85	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Wetness	0.00
		Droughty	0.20	Depth to cemented pan	0.00	Rock fragments	0.13
		Depth to cemented pan	0.36	Cobble content	0.99	Depth to cemented pan	0.36
354B: Gogebic-----	90	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Wetness	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to cemented pan	0.00
		Droughty	0.11			Rock fragments	0.98
						Too acid	0.98
354C: Gogebic-----	90	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Wetness	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to cemented pan	0.00
		Droughty	0.11			Slope	0.37
						Rock fragments	0.98
						Too acid	0.98
354D: Gogebic-----	85	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Slope	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Wetness	0.00
		Droughty	0.11	Slope	0.00	Depth to cemented pan	0.00
						Rock fragments	0.98
						Too acid	0.98
354E: Schweitzer-----	85	Fair		Poor		Poor	
		Depth to cemented pan	0.01	Slope	0.00	Slope	0.00
		Too acid	0.08	Depth to cemented pan	0.00	Rock fragments	0.00
		Droughty	0.17	Cobble content	0.14	Depth to cemented pan	0.01
		Stone content	0.68	Stone content	0.68	Too acid	0.98
		Cobble content	0.99				
354F: Schweitzer-----	90	Fair		Poor		Poor	
		Depth to cemented pan	0.01	Slope	0.00	Slope	0.00
		Too acid	0.08	Depth to cemented pan	0.00	Rock fragments	0.00
		Droughty	0.17	Cobble content	0.14	Depth to cemented pan	0.01
		Stone content	0.68	Stone content	0.68	Too acid	0.98
		Cobble content	0.99				

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
363C:							
Talus-----	50	Not rated		Not rated		Not rated	
Arcadian-----	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00			Depth to bedrock	0.00
		Too acid	0.50			Slope	0.37
		Too sandy	0.78			Too sandy	0.78
363D:							
Talus-----	46	Not rated		Not rated		Not rated	
Arcadian-----	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Too acid	0.50			Depth to bedrock	0.00
		Too sandy	0.78			Too sandy	0.78
363E:							
Talus-----	50	Not rated		Not rated		Not rated	
Arcadian-----	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Too acid	0.50			Depth to bedrock	0.00
		Too sandy	0.78			Too sandy	0.78
363F:							
Talus-----	50	Not rated		Not rated		Not rated	
Arcadian-----	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Too acid	0.50			Depth to bedrock	0.00
		Too sandy	0.78			Too sandy	0.78
364F:							
Talus-----	91	Not rated		Not rated		Not rated	
365F:							
Rock outcrop-----	90	Not rated		Not rated		Not rated	
369C:							
Dishno-----	35	Poor		Poor		Fair	
		Stone content	0.00	Stone content	0.00	Too sandy	0.03
		Too sandy	0.03	Depth to bedrock	0.23	Rock fragments	0.32
		Low content of organic matter	0.12	Wetness	0.53	Slope	0.37
		Too acid	0.50			Hard to reclaim (rock fragments)	0.50
		Droughty	0.92			Wetness	0.53
Gogebic-----	30	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Wetness	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to cemented pan	0.00
		Droughty	0.11			Slope	0.37
						Rock fragments	0.98
						Too acid	0.98

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
369C: Peshekee-----	15	Poor Depth to bedrock Droughty Too acid Low content of organic matter Cobble content	 0.00 0.00 0.50 0.88 0.98	Poor Depth to bedrock	0.00	Poor Depth to bedrock Rock fragments Slope	 0.00 0.00 0.37
Rock outcrop-----	15	Not rated		Not rated		Not rated	
369D: Dishno-----	35	Poor Stone content Too sandy Low content of organic matter Too acid Droughty	 0.00 0.03 0.12 0.50 0.92	Poor Slope Stone content Depth to bedrock Wetness	 0.00 0.00 0.23 0.53	Poor Slope Too sandy Rock fragments Hard to reclaim (rock fragments) Wetness	 0.00 0.03 0.32 0.50 0.53
Gogebic-----	30	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan Slope	 0.00 0.00 0.00	Poor Slope Wetness Depth to cemented pan Rock fragments Too acid	 0.00 0.00 0.00 0.98 0.98
Peshekee-----	15	Poor Depth to bedrock Droughty Too acid Low content of organic matter Cobble content	 0.00 0.00 0.50 0.88 0.98	Poor Depth to bedrock Slope	 0.00 0.00	Poor Slope Depth to bedrock Rock fragments	 0.00 0.00 0.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
369E: Michigamme-----	30	Fair Too acid Depth to bedrock Droughty	 0.50 0.65 0.82	Poor Slope Depth to bedrock	 0.00 0.00	Poor Slope Rock fragments Depth to bedrock Too acid	 0.00 0.23 0.65 0.98
Schweitzer-----	25	Fair Depth to cemented pan Too acid Droughty Stone content Cobble content	 0.01 0.08 0.17 0.68 0.99	Poor Slope Depth to cemented pan Cobble content Stone content	 0.00 0.00 0.14 0.68	Poor Slope Rock fragments Depth to cemented pan Too acid	 0.00 0.00 0.01 0.98

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
369E: Peshekee-----	20	Poor Depth to bedrock Droughty Too acid Low content of organic matter Cobble content	 0.00 0.00 0.50 0.88 0.98	Poor Depth to bedrock Slope	 0.00 0.00	Poor Slope Depth to bedrock Rock fragments	 0.00 0.00 0.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
369F: Michigamme-----	30	Fair Too acid Depth to bedrock Droughty	 0.50 0.65 0.82	Poor Slope Depth to bedrock	 0.00 0.00	Poor Slope Rock fragments Depth to bedrock Too acid	 0.00 0.23 0.65 0.98
Schweitzer-----	25	Fair Depth to cemented pan Too acid Droughty Stone content Cobble content	 0.01 0.08 0.17 0.68 0.99	Poor Slope Depth to cemented pan Cobble content Stone content	 0.00 0.00 0.14 0.68	Poor Slope Rock fragments Depth to cemented pan Too acid	 0.00 0.00 0.01 0.98
Peshekee-----	20	Poor Depth to bedrock Droughty Too acid Low content of organic matter Cobble content	 0.00 0.00 0.50 0.88 0.98	Poor Depth to bedrock Slope	 0.00 0.00	Poor Slope Depth to bedrock Rock fragments	 0.00 0.00 0.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
370E: Peshekee-----	55	Poor Depth to bedrock Droughty Too acid Low content of organic matter Cobble content	 0.00 0.00 0.50 0.88 0.98	Poor Depth to bedrock Slope	 0.00 0.00	Poor Slope Depth to bedrock Rock fragments	 0.00 0.00 0.00
Rock outcrop-----	40	Not rated		Not rated		Not rated	
370F: Peshekee-----	55	Poor Depth to bedrock Droughty Too acid Low content of organic matter Cobble content	 0.00 0.00 0.50 0.88 0.98	Poor Depth to bedrock Slope	 0.00 0.00	Poor Slope Depth to bedrock Rock fragments	 0.00 0.00 0.00
Rock outcrop-----	40	Not rated		Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
375: Dumps and Pits, mine	95	Not rated		Not rated		Not rated	
380: Beseman-----	55	Poor Too acid	0.00	Poor Wetness	0.00	Poor Wetness High content of organic matter Too acid	0.00 0.00 0.32
Greenwood-----	40	Poor Too acid	0.00	Poor Wetness	0.00	Poor Wetness High content of organic matter Too acid	0.00 0.00 0.12
382: Cathro-----	45	Fair Low content of organic matter	0.12	Poor Wetness	0.00	Poor Wetness High content of organic matter Hard to reclaim (rock fragments)	0.00 0.00 0.98
Arnheim-----	44	Fair Low content of organic matter Too acid Water erosion	0.12 0.50 0.90	Poor Wetness	0.00	Poor Wetness	0.00
388: Gay-----	50	Fair Low content of organic matter Too acid	0.12 0.50	Poor Wetness	0.00	Poor Wetness	0.00
Tula-----	40	Fair Too acid Droughty Depth to cemented pan	0.03 0.18 0.36	Poor Wetness Depth to cemented pan Cobble content	0.00 0.00 0.95	Poor Wetness Rock fragments Depth to cemented pan	0.00 0.01 0.36
398B: Tula-----	50	Fair Too acid Droughty Depth to cemented pan	0.03 0.18 0.36	Poor Wetness Depth to cemented pan Cobble content	0.00 0.00 0.95	Poor Wetness Rock fragments Depth to cemented pan	0.00 0.01 0.36
Gay-----	30	Fair Low content of organic matter Too acid	0.12 0.50	Poor Wetness	0.00	Poor Wetness	0.00
Wakefield-----	15	Poor Depth to cemented pan Too acid	0.00 0.00	Poor Wetness Depth to cemented pan	0.00 0.00	Poor Wetness Depth to cemented pan Too acid	0.00 0.00 0.88

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
418: Loxley-----	45	Poor Too acid	0.00	Poor Wetness	0.00	Poor Wetness High content of organic matter Too acid	0.00 0.00 0.32
Beseman-----	41	Poor Too acid	0.00	Poor Wetness	0.00	Poor Wetness High content of organic matter Too acid	0.00 0.00 0.32
419: Pleine-----	45	Fair Low content of organic matter Too acid	0.12 0.50	Poor Wetness Stone content	0.00 0.97	Poor Wetness Rock fragments Hard to reclaim (rock fragments)	0.00 0.91 0.95
Cathro-----	30	Fair Low content of organic matter	0.12	Poor Wetness	0.00	Poor Wetness High content of organic matter Hard to reclaim (rock fragments)	0.00 0.00 0.98
Gay-----	25	Fair Low content of organic matter Too acid	0.12 0.50	Poor Wetness	0.00	Poor Wetness	0.00
424: Gay-----	85	Fair Low content of organic matter Too acid	0.12 0.50	Poor Wetness	0.00	Poor Wetness	0.00
425: Foxpaw-----	45	Fair Low content of organic matter Too acid	0.12 0.50	Poor Wetness	0.00	Poor Wetness Rock fragments Too acid Hard to reclaim (rock fragments)	0.00 0.88 0.95 0.99
Gay-----	40	Fair Low content of organic matter Too acid	0.12 0.50	Poor Wetness	0.00	Poor Wetness	0.00
428C: Gogebic-----	70	Poor Too acid Depth to cemented pan Droughty	0.00 0.00 0.11	Poor Wetness Depth to cemented pan	0.00 0.00	Poor Wetness Depth to cemented pan Slope Rock fragments Too acid	0.00 0.00 0.37 0.98 0.98

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
428C: Michigamme-----	25	Fair		Poor		Fair	
		Too acid	0.50	Depth to bedrock	0.00	Rock fragments	0.23
		Depth to bedrock	0.65			Slope	0.37
		Droughty	0.82			Depth to bedrock	0.65
						Too acid	0.98
428D: Gogebic-----	70	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Slope	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Wetness	0.00
		Droughty	0.11	Slope	0.00	Depth to cemented pan	0.00
						Rock fragments	0.98
						Too acid	0.98
Michigamme-----	25	Fair		Poor		Poor	
		Too acid	0.50	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.65	Slope	0.00	Rock fragments	0.23
		Droughty	0.82			Depth to bedrock	0.65
						Too acid	0.98
429B: Gogebic-----	79	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Wetness	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to cemented pan	0.00
		Droughty	0.11			Rock fragments	0.98
						Too acid	0.98
Peshekee-----	15	Poor		Poor		Poor	
		Depth to bedrock	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Droughty	0.00			Rock fragments	0.00
		Too acid	0.50				
		Low content of organic matter	0.88				
		Cobble content	0.98				
429C: Gogebic-----	79	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Wetness	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to cemented pan	0.00
		Droughty	0.11			Slope	0.37
						Rock fragments	0.98
						Too acid	0.98
Peshekee-----	15	Poor		Poor		Poor	
		Depth to bedrock	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Droughty	0.00			Rock fragments	0.00
		Too acid	0.50			Slope	0.37
		Low content of organic matter	0.88				
		Cobble content	0.98				

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
429D: Gogebic-----	75	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan Slope	 0.00 0.00 0.00	Poor Slope Wetness Depth to cemented pan Rock fragments Too acid	 0.00 0.00 0.00 0.98 0.98
Peshekee-----	15	Poor Depth to bedrock Droughty Too acid Low content of organic matter Cobble content	 0.00 0.00 0.50 0.88 0.98	Poor Depth to bedrock Slope	 0.00 0.00	Poor Slope Depth to bedrock Rock fragments	 0.00 0.00 0.00
429E: Schweitzer-----	60	Fair Depth to cemented pan Too acid Droughty Stone content Cobble content	 0.01 0.08 0.17 0.68 0.99	Poor Slope Depth to cemented pan Cobble content Stone content	 0.00 0.00 0.14 0.68	Poor Slope Rock fragments Depth to cemented pan Too acid	 0.00 0.00 0.01 0.98
Peshekee-----	35	Poor Depth to bedrock Droughty Too acid Low content of organic matter Cobble content	 0.00 0.00 0.50 0.88 0.98	Poor Depth to bedrock Slope	 0.00 0.00	Poor Slope Depth to bedrock Rock fragments	 0.00 0.00 0.00
430B: Stutts-----	90	Poor Too sandy Wind erosion Low content of organic matter Too acid Droughty	 0.00 0.00 0.06 0.50 0.99	Good		Poor Too sandy	 0.00
430C: Stutts-----	90	Poor Too sandy Wind erosion Low content of organic matter Too acid Droughty	 0.00 0.00 0.06 0.50 0.99	Good		Poor Too sandy Slope	 0.00 0.37
430D: Stutts-----	90	Poor Too sandy Wind erosion Low content of organic matter Too acid Droughty	 0.00 0.00 0.06 0.50 0.99	Poor Slope	 0.00	Poor Slope Too sandy	 0.00 0.00

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
430E: Stutts-----	90	Poor Too sandy Wind erosion Low content of organic matter Too acid Droughty	 0.00 0.00 0.06 0.50 0.99	Poor Slope	 0.00	Poor Slope Too sandy	 0.00 0.00
432C: Gogebic-----	68	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan	 0.00 0.00	Poor Wetness Depth to cemented pan Slope Rock fragments Too acid	 0.00 0.00 0.37 0.98 0.98
Michigamme-----	15	Fair Too acid Depth to bedrock Droughty	 0.50 0.65 0.82	Poor Depth to bedrock	 0.00	Fair Rock fragments Slope Depth to bedrock Too acid	 0.23 0.37 0.65 0.98
Rock outcrop-----	15	Not rated		Not rated		Not rated	
432D: Gogebic-----	68	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan Slope	 0.00 0.00 0.32	Poor Wetness Slope Depth to cemented pan Rock fragments Too acid	 0.00 0.00 0.00 0.98 0.98
Michigamme-----	15	Fair Too acid Depth to bedrock Droughty	 0.50 0.65 0.82	Poor Depth to bedrock Slope	 0.00 0.32	Poor Slope Rock fragments Depth to bedrock Too acid	 0.00 0.23 0.65 0.98
Rock outcrop-----	15	Not rated		Not rated		Not rated	
432E: Schweitzer-----	45	Fair Depth to cemented pan Too acid Droughty Stone content Cobble content	 0.01 0.08 0.17 0.68 0.99	Poor Slope Depth to cemented pan Cobble content Stone content	 0.00 0.00 0.14 0.68	Poor Slope Rock fragments Depth to cemented pan Too acid	 0.00 0.00 0.01 0.98
Michigamme-----	20	Fair Too acid Depth to bedrock Droughty	 0.50 0.65 0.82	Poor Depth to bedrock Slope	 0.00 0.00	Poor Slope Rock fragments Depth to bedrock Too acid	 0.00 0.23 0.65 0.98
Rock outcrop-----	20	Not rated		Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
432F: Schweitzer-----	45	Fair		Poor		Poor	
		Depth to cemented pan	0.01	Slope	0.00	Slope	0.00
		Too acid	0.08	Depth to cemented pan	0.00	Rock fragments	0.00
		Droughty	0.17	Cobble content	0.14	Depth to cemented pan	0.01
		Stone content	0.68	Stone content	0.68	Too acid	0.98
		Cobble content	0.99				
Michigamme-----	20	Fair		Poor		Poor	
		Too acid	0.50	Slope	0.00	Slope	0.00
		Depth to bedrock	0.65	Depth to bedrock	0.00	Rock fragments	0.23
		Droughty	0.82			Depth to bedrock	0.65
						Too acid	0.98
Rock outcrop-----	20	Not rated		Not rated		Not rated	
433B: McMillan-----	85	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Too acid	0.08				
		Low content of organic matter	0.08				
		Droughty	0.58				
433C: McMillan-----	85	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Too acid	0.08			Slope	0.37
		Low content of organic matter	0.08				
		Droughty	0.58				
433D: McMillan-----	85	Poor		Poor		Poor	
		Too sandy	0.00	Slope	0.00	Slope	0.00
		Too acid	0.08			Too sandy	0.00
		Low content of organic matter	0.08				
		Droughty	0.58				
435C: Kalkaska-----	45	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Slope	0.84
		Low content of organic matter	0.12			Too acid	0.98
		Too acid	0.50				
		Droughty	0.99				
Waiska-----	40	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Rock fragments	0.00
		Droughty	0.00			Hard to reclaim (rock fragments)	0.00
		Low content of organic matter	0.12			Slope	0.84
		Too acid	0.50			Too acid	0.98

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
435D: Kalkaska-----	45	Poor Too sandy Wind erosion Low content of organic matter Too acid Droughty	 0.00 0.00 0.12 0.50 0.99	Fair Slope	0.32	Poor Slope Too sandy Too acid	 0.00 0.00 0.98
Waiska-----	40	Poor Too sandy Wind erosion Droughty Low content of organic matter Too acid	 0.00 0.00 0.00 0.12 0.50	Fair Slope	0.32	Poor Slope Too sandy Rock fragments Hard to reclaim (rock fragments) Too acid	 0.00 0.00 0.00 0.00 0.98
435E: Kalkaska-----	45	Poor Too sandy Wind erosion Low content of organic matter Too acid Droughty	 0.00 0.00 0.12 0.50 0.99	Poor Slope	0.00	Poor Slope Too sandy Too acid	 0.00 0.00 0.98
Waiska-----	40	Poor Too sandy Wind erosion Droughty Low content of organic matter Too acid	 0.00 0.00 0.00 0.12 0.50	Poor Slope	0.00	Poor Slope Too sandy Rock fragments Hard to reclaim (rock fragments) Too acid	 0.00 0.00 0.00 0.00 0.98
437B: Manitowish-----	65	Poor Too acid Too sandy Low content of organic matter	 0.00 0.10 0.12	Fair Wetness	0.53	Fair Too sandy Rock fragments Wetness Too acid Hard to reclaim (rock fragments)	 0.10 0.12 0.53 0.68 0.98
Channing-----	20	Poor Too sandy Low content of organic matter Too acid Droughty	 0.00 0.12 0.50 0.93	Poor Wetness	0.00	Poor Too sandy Wetness Rock fragments Hard to reclaim (rock fragments)	 0.00 0.00 0.00 0.08
448F: Rockland-----	75	Fair Low content of organic matter Too acid	 0.12 0.50	Poor Slope	0.00	Poor Slope	0.00
Rock outcrop-----	25	Not rated		Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
449C: Flintsteel-----	70	Poor Too acid Low content of organic matter	0.00 0.12	Fair Wetness Low strength	0.14 0.78	Fair Wetness Slope	0.14 0.37
Minocqua-----	30	Fair Low content of organic matter Too acid	0.12 0.68	Poor Wetness	0.00	Poor Wetness Rock fragments Hard to reclaim (rock fragments)	0.00 0.12 0.68
452F: Rockland-----	90	Fair Low content of organic matter Too acid	0.12 0.50	Poor Slope	0.00	Poor Slope	0.00
460B: Belding-----	55	Fair Low content of organic matter Too acid Carbonate content Droughty	0.12 0.50 0.97 0.99	Poor Wetness Low strength	0.00 0.00	Poor Wetness	0.00
Manido-----	25	Poor Too sandy Wind erosion Too acid Low content of organic matter	0.00 0.00 0.00 0.12	Fair Wetness	0.53	Poor Too sandy Too acid Wetness	0.00 0.12 0.53
461B: Loggerhead-----	85	Fair Too acid Low content of organic matter	0.03 0.50	Poor Wetness Low strength	0.00 0.22	Poor Wetness Too acid Rock fragments	0.00 0.82 0.92
462C: Nonesuch-----	75	Fair Depth to cemented pan Droughty Too acid Depth to bedrock	0.05 0.11 0.50 0.84	Poor Depth to cemented pan Depth to bedrock Wetness	0.00 0.00 0.14	Poor Rock fragments Depth to cemented pan Wetness Too acid Depth to bedrock Slope	0.00 0.05 0.14 0.68 0.84 0.96
Rock outcrop-----	15	Not rated		Not rated		Not rated	
509: Cathro-----	45	Fair Low content of organic matter	0.12	Poor Wetness	0.00	Poor Wetness High content of organic matter Hard to reclaim (rock fragments)	0.00 0.00 0.98

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
509: Minocqua-----	40	Fair Low content of organic matter Too acid	 0.12 0.68	Poor Wetness	 0.00	Poor Wetness Rock fragments Hard to reclaim (rock fragments)	 0.00 0.12 0.68
511A: Gogebic-----	40	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan	 0.00 0.00	Poor Wetness Depth to cemented pan Rock fragments Too acid	 0.00 0.00 0.98 0.98
Tula-----	30	Fair Too acid Droughty Depth to cemented pan	 0.03 0.18 0.36	Poor Wetness Depth to cemented pan Cobble content	 0.00 0.00 0.95	Poor Wetness Rock fragments Depth to cemented pan	 0.00 0.01 0.36
Chabeneau-----	15	Poor Low content of organic matter Too acid	 0.00 0.03	Fair Wetness	 0.14	Poor Hard to reclaim (rock fragments) Wetness Rock fragments Too acid	 0.00 0.14 0.82 0.95
519B: Gogebic-----	50	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan	 0.00 0.00	Poor Wetness Depth to cemented pan Rock fragments Too acid	 0.00 0.00 0.98 0.98
Karlin-----	40	Poor Too sandy Low content of organic matter Too acid	 0.00 0.12 0.50	Good		Poor Too sandy Too acid	 0.00 0.95
519C: Gogebic-----	50	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan	 0.00 0.00	Poor Wetness Depth to cemented pan Slope Rock fragments Too acid	 0.00 0.00 0.37 0.98 0.98
Karlin-----	40	Poor Too sandy Low content of organic matter Too acid	 0.00 0.12 0.50	Good		Poor Too sandy Slope Too acid	 0.00 0.37 0.95

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
519D: Gogebic-----	50	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan Slope	 0.00 0.00 0.00	Poor Slope Wetness Depth to cemented pan Rock fragments Too acid	 0.00 0.00 0.00 0.98 0.98
Karlin-----	40	Poor Too sandy Low content of organic matter Too acid	 0.00 0.12 0.50	Poor Slope	 0.00	Poor Slope Too sandy Too acid	 0.00 0.00 0.95
522: Pits, sand and gravel-----	100	Not rated		Not rated		Not rated	
523D: Gogebic, sandy substratum-----	53	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan Slope	 0.00 0.00 0.50	Poor Wetness Slope Depth to cemented pan Rock fragments Too acid	 0.00 0.00 0.00 0.98 0.98
Karlin-----	40	Poor Too sandy Low content of organic matter Too acid	 0.00 0.12 0.50	Fair Slope	 0.32	Poor Too sandy Slope Too acid	 0.00 0.00 0.95
524C: Waiska-----	45	Poor Too sandy Wind erosion Droughty Low content of organic matter Too acid	 0.00 0.00 0.00 0.12 0.50	Good		Poor Too sandy Rock fragments Hard to reclaim (rock fragments) Slope Too acid	 0.00 0.00 0.00 0.37 0.98
Amasa-----	40	Poor Too acid Low content of organic matter	 0.00 0.12	Good		Poor Hard to reclaim (rock fragments) Slope Too acid Rock fragments	 0.00 0.37 0.41 0.94
524D: Waiska-----	45	Poor Too sandy Wind erosion Droughty Low content of organic matter Too acid	 0.00 0.00 0.00 0.12 0.50	Poor Slope	 0.00	Poor Slope Too sandy Rock fragments Hard to reclaim (rock fragments) Too acid	 0.00 0.00 0.00 0.00 0.98

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
524D: Amasa-----	40	Poor Too acid Low content of organic matter	0.00 0.12	Poor Slope	0.00	Poor Slope Hard to reclaim (rock fragments) Too acid Rock fragments	0.00 0.00 0.41 0.94
524E: Waiska-----	45	Poor Too sandy Wind erosion Droughty Low content of organic matter Too acid	0.00 0.00 0.00 0.12 0.50	Poor Slope	0.00	Poor Slope Too sandy Rock fragments Hard to reclaim (rock fragments) Too acid	0.00 0.00 0.00 0.00 0.98
Amasa-----	40	Poor Too acid Low content of organic matter	0.00 0.12	Poor Slope	0.00	Poor Slope Hard to reclaim (rock fragments) Too acid Rock fragments	0.00 0.00 0.41 0.94
527B: Wakefield-----	85	Poor Depth to cemented pan Too acid	0.00 0.00	Poor Wetness Depth to cemented pan	0.00 0.00	Poor Wetness Depth to cemented pan Too acid	0.00 0.00 0.88
527C: Wakefield-----	85	Poor Depth to cemented pan Too acid	0.00 0.00	Poor Wetness Depth to cemented pan	0.00 0.00	Poor Wetness Depth to cemented pan Slope Too acid	0.00 0.00 0.37 0.88
527D: Wakefield-----	85	Poor Depth to cemented pan Too acid	0.00 0.00	Poor Wetness Depth to cemented pan Slope	0.00 0.00 0.00	Poor Slope Wetness Depth to cemented pan Too acid	0.00 0.00 0.00 0.88
528B: Gogebic-----	48	Poor Too acid Depth to cemented pan Droughty	0.00 0.00 0.11	Poor Wetness Depth to cemented pan	0.00 0.00	Poor Wetness Depth to cemented pan Rock fragments Too acid	0.00 0.00 0.98 0.98

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
528B: Annalake-----	45	Poor Too acid Low content of organic matter Too sandy Water erosion	 0.00 0.12 0.20 0.99	Fair Wetness	 0.14	Fair Wetness Too sandy Too acid	 0.14 0.20 0.98
528C: Gogebic-----	48	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan	 0.00 0.00	Poor Wetness Depth to cemented pan Slope Rock fragments Too acid	 0.00 0.00 0.37 0.98 0.98
Annalake-----	45	Poor Too acid Low content of organic matter Too sandy Water erosion	 0.00 0.12 0.20 0.99	Fair Wetness	 0.14	Fair Wetness Too sandy Slope Too acid	 0.14 0.20 0.37 0.98
528D: Gogebic-----	48	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan Slope	 0.00 0.00 0.00	Poor Slope Wetness Depth to cemented pan Rock fragments Too acid	 0.00 0.00 0.00 0.98 0.98
Annalake-----	45	Poor Too acid Low content of organic matter Too sandy Water erosion	 0.00 0.12 0.20 0.99	Poor Slope Wetness	 0.00 0.14	Poor Slope Wetness Too sandy Too acid	 0.00 0.14 0.20 0.98
551B: Gogebic-----	65	Poor Too acid Depth to cemented pan Droughty	 0.00 0.00 0.11	Poor Wetness Depth to cemented pan	 0.00 0.00	Poor Wetness Depth to cemented pan Rock fragments Too acid	 0.00 0.00 0.98 0.98
Dishno-----	30	Poor Stone content Too sandy Low content of organic matter Too acid Droughty	 0.00 0.03 0.12 0.50 0.92	Poor Stone content Depth to bedrock Wetness	 0.00 0.23 0.53	Fair Too sandy Rock fragments Hard to reclaim (rock fragments) Wetness	 0.03 0.32 0.50 0.53
566: Beach, rubbly-----	95	Not rated		Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
576B: Flintsteel-----	45	Poor Too acid Low content of organic matter	0.00 0.12	Fair Wetness Low strength	0.14 0.78	Fair Wetness	0.14
Loggerhead-----	40	Fair Too acid Low content of organic matter	0.03 0.50	Fair Wetness Low strength	0.14 0.22	Fair Wetness Too acid Rock fragments	0.14 0.82 0.92
576C: Flintsteel-----	45	Poor Too acid Low content of organic matter	0.00 0.12	Fair Wetness Low strength	0.14 0.78	Fair Wetness Slope	0.14 0.84
Loggerhead-----	40	Fair Too acid Low content of organic matter	0.03 0.50	Fair Wetness Low strength	0.14 0.22	Fair Wetness Too acid Slope Rock fragments	0.14 0.82 0.84 0.92
576D: Flintsteel-----	45	Poor Too acid Low content of organic matter	0.00 0.12	Poor Slope Wetness Low strength	0.00 0.14 0.78	Poor Slope Wetness	0.00 0.14
Loggerhead-----	40	Fair Too acid Low content of organic matter	0.03 0.50	Poor Slope Wetness Low strength	0.00 0.14 0.22	Poor Slope Wetness Too acid Rock fragments	0.00 0.14 0.82 0.92
577B: Loggerhead-----	35	Fair Too acid Low content of organic matter	0.03 0.50	Fair Wetness Low strength	0.14 0.22	Fair Wetness Too acid Rock fragments	0.14 0.82 0.92
Chabeneau-----	30	Poor Low content of organic matter Too acid	0.00 0.03	Fair Wetness	0.14	Poor Hard to reclaim (rock fragments) Wetness Rock fragments Too acid	0.00 0.14 0.82 0.95
Arcadian-----	25	Poor Droughty Depth to bedrock Too acid Too sandy	0.00 0.00 0.50 0.78	Poor Depth to bedrock	0.00	Poor Rock fragments Depth to bedrock Too sandy	0.00 0.00 0.78

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
577C: Loggerhead-----	35	Fair Too acid Low content of organic matter	 0.03 0.50	Fair Wetness Low strength	 0.14 0.22	Fair Wetness Too acid Slope Rock fragments	 0.14 0.82 0.84 0.92
Chabeneau-----	30	Poor Low content of organic matter Too acid	 0.00 0.03	Fair Wetness	 0.14	Poor Hard to reclaim (rock fragments) Wetness Rock fragments Too acid	 0.00 0.14 0.82 0.95
Arcadian-----	25	Poor Droughty Depth to bedrock Too acid Too sandy	 0.00 0.00 0.50 0.78	Poor Depth to bedrock	 0.00	Poor Rock fragments Depth to bedrock Slope Too sandy	 0.00 0.00 0.37 0.78
577D: Loggerhead-----	35	Fair Too acid Low content of organic matter	 0.03 0.50	Fair Wetness Low strength Slope	 0.14 0.22 0.50	Poor Slope Wetness Too acid Rock fragments	 0.00 0.14 0.82 0.92
Chabeneau-----	30	Poor Low content of organic matter Too acid	 0.00 0.03	Fair Wetness Slope	 0.14 0.82	Poor Slope Hard to reclaim (rock fragments) Wetness Rock fragments Too acid	 0.00 0.00 0.14 0.82 0.95
Arcadian-----	25	Poor Droughty Depth to bedrock Too acid Too sandy	 0.00 0.00 0.50 0.78	Poor Depth to bedrock Slope	 0.00 0.00	Poor Slope Rock fragments Depth to bedrock Too sandy	 0.00 0.00 0.00 0.78
578D: Arcadian-----	59	Poor Droughty Depth to bedrock Too acid Too sandy	 0.00 0.00 0.50 0.78	Poor Depth to bedrock Slope	 0.00 0.50	Poor Rock fragments Depth to bedrock Slope Too sandy	 0.00 0.00 0.00 0.78
Keweenaw-----	40	Poor Too sandy Wind erosion Too acid	 0.00 0.00 0.08	Fair Slope	 0.50	Poor Too sandy Slope Too acid Rock fragments	 0.00 0.00 0.98 0.99
625B: Fence-----	95	Fair Low content of organic matter Too acid Water erosion	 0.12 0.50 0.90	Fair Wetness	 0.14	Fair Wetness	 0.14

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
625C: Fence-----	98	Fair Low content of organic matter Too acid Water erosion	 0.12 0.50 0.90	Fair Wetness	 0.14	Fair Wetness Slope	 0.14 0.37
626D: Sporley-----	85	Fair Low content of organic matter Too acid Water erosion	 0.12 0.50 0.90	Poor Slope Low strength	 0.00 0.78	Poor Slope	 0.00
626E: Sporley-----	90	Fair Low content of organic matter Too acid Water erosion	 0.12 0.50 0.90	Poor Slope Low strength	 0.00 0.78	Poor Slope	 0.00
648B: Annalake-----	93	Poor Too acid Low content of organic matter Too sandy Water erosion	 0.00 0.12 0.20 0.99	Fair Wetness	 0.14	Fair Wetness Too sandy Too acid	 0.14 0.20 0.98
648C: Annalake-----	93	Poor Too acid Low content of organic matter Too sandy Water erosion	 0.00 0.12 0.20 0.99	Fair Wetness	 0.14	Fair Wetness Too sandy Slope Too acid	 0.14 0.20 0.37 0.98
650: Leafriver-----	90	Poor Wind erosion Too sandy Low content of organic matter Too acid	 0.00 0.00 0.12 0.97	Poor Wetness	 0.00	Poor Wetness Too sandy Rock fragments	 0.00 0.00 0.12
652B: Manido-----	52	Poor Too sandy Wind erosion Too acid Low content of organic matter	 0.00 0.00 0.00 0.12	Fair Wetness	 0.53	Poor Too sandy Too acid Wetness	 0.00 0.12 0.53
Annalake-----	24	Poor Too acid Low content of organic matter Too sandy Water erosion	 0.00 0.12 0.20 0.99	Fair Wetness	 0.14	Fair Wetness Too sandy Too acid	 0.14 0.20 0.98

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
656B: Stutts-----	60	Poor Too sandy Wind erosion Low content of organic matter Too acid Droughty	 0.00 0.00 0.06 0.50 0.99	Good		Poor Too sandy	 0.00
Zandi-----	30	Poor Wind erosion Too acid Low content of organic matter	 0.00 0.08 0.88	Good		Fair Too acid	 0.92
656C: Stutts-----	60	Poor Too sandy Wind erosion Low content of organic matter Too acid Droughty	 0.00 0.00 0.06 0.50 0.99	Good		Poor Too sandy Slope	 0.00 0.37
Zandi-----	30	Poor Wind erosion Too acid Low content of organic matter	 0.00 0.08 0.88	Good		Fair Slope Too acid	 0.37 0.92
656D: Stutts-----	60	Poor Too sandy Wind erosion Low content of organic matter Too acid Droughty	 0.00 0.00 0.06 0.50 0.99	Poor Slope	0.00	Poor Slope Too sandy	 0.00 0.00
Zandi-----	30	Poor Wind erosion Too acid Low content of organic matter	 0.00 0.08 0.88	Poor Slope	0.00	Poor Slope Too acid	 0.00 0.92
680B: Tonkey-----	37	Fair Low content of organic matter Too acid	 0.12 0.68	Poor Wetness	0.00	Poor Wetness	 0.00
Pleine-----	32	Fair Low content of organic matter Too acid	 0.12 0.50	Poor Wetness Stone content	0.00 0.97	Poor Wetness Rock fragments Hard to reclaim (rock fragments)	 0.00 0.89 0.92

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
680B: Annalake-----	20	Poor		Fair		Fair	
		Too acid	0.00	Wetness	0.14	Wetness	0.14
		Low content of organic matter	0.12			Too sandy	0.20
		Too sandy	0.20			Too acid	0.98
		Water erosion	0.99				
681: Cathro-----	45	Poor		Poor		Poor	
		Wind erosion	0.00	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.12			High content of organic matter	0.00
						Hard to reclaim (rock fragments)	0.98
Tonkey-----	37	Fair		Poor		Poor	
		Low content of organic matter	0.12	Wetness	0.00	Wetness	0.00
		Too acid	0.68				
683B: Amasa-----	45	Poor		Good		Poor	
		Too acid	0.00			Hard to reclaim (rock fragments)	0.00
		Low content of organic matter	0.12			Too acid	0.41
						Rock fragments	0.94
Oldman-----	40	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Wetness	0.00
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Depth to cemented pan	0.05	Cobble content	0.00	Depth to cemented pan	0.05
		Cobble content	0.14	Stone content	0.42	Too acid	0.59
683C: Amasa-----	45	Poor		Good		Poor	
		Too acid	0.00			Hard to reclaim (rock fragments)	0.00
		Low content of organic matter	0.12			Slope	0.37
						Too acid	0.41
						Rock fragments	0.94
Oldman-----	40	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Wetness	0.00
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Depth to cemented pan	0.05	Cobble content	0.00	Depth to cemented pan	0.05
		Cobble content	0.14	Stone content	0.42	Slope	0.37
						Too acid	0.59
683D: Amasa-----	45	Poor		Poor		Poor	
		Too acid	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.12			Hard to reclaim (rock fragments)	0.00
						Too acid	0.41
						Rock fragments	0.94

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
683D: Oldman-----	40	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Slope	0.00
		Droughty	0.00	Depth to cemented	0.00	Wetness	0.00
		Depth to cemented	0.05	pan		Rock fragments	0.00
		pan		Cobble content	0.00	Depth to cemented	0.05
		Cobble content	0.14	Slope	0.18	pan	
				Stone content	0.42	Too acid	0.59
684B: Amasa-----	70	Poor		Good		Poor	
		Too acid	0.00			Hard to reclaim	0.00
		Low content of	0.12			(rock fragments)	
		organic matter				Too acid	0.41
		Too sandy	0.97			Too sandy	0.97
						Rock fragments	0.99
684C: Amasa-----	78	Poor		Good		Poor	
		Too acid	0.00			Hard to reclaim	0.00
		Low content of	0.12			(rock fragments)	
		organic matter				Slope	0.37
						Too acid	0.41
						Rock fragments	0.94
684D: Amasa-----	78	Poor		Poor		Poor	
		Too acid	0.00	Slope	0.00	Slope	0.00
		Low content of	0.12			Hard to reclaim	0.00
		organic matter				(rock fragments)	
						Too acid	0.41
						Rock fragments	0.94
686B: Annalake-----	40	Poor		Fair		Fair	
		Too acid	0.00	Wetness	0.14	Wetness	0.14
		Low content of	0.12			Too sandy	0.20
		organic matter				Too acid	0.98
		Too sandy	0.20				
		Water erosion	0.99				
Robago-----	40	Fair		Poor		Poor	
		Low content of	0.12	Wetness	0.00	Wetness	0.00
		organic matter					
		Too acid	0.68				
		Water erosion	0.99				
688: Cathro-----	60	Poor		Poor		Poor	
		Wind erosion	0.00	Wetness	0.00	Wetness	0.00
		Low content of	0.12			High content of	0.00
		organic matter				organic matter	
						Hard to reclaim	0.98
						(rock fragments)	

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
688: Leafriver-----	40	Poor		Poor		Poor	
		Wind erosion	0.00	Wetness	0.00	Wetness	0.00
		Too sandy	0.00			Too sandy	0.00
		Low content of organic matter	0.12			Rock fragments	0.12
		Too acid	0.97				
689B: Chabeneau-----	35	Poor		Fair		Poor	
		Low content of organic matter	0.00	Wetness	0.14	Hard to reclaim (rock fragments)	0.00
		Too acid	0.03			Wetness	0.14
						Rock fragments	0.82
						Too acid	0.95
Channing-----	30	Poor		Poor		Poor	
		Too sandy	0.00	Wetness	0.00	Too sandy	0.00
		Low content of organic matter	0.12			Wetness	0.00
		Too acid	0.50			Rock fragments	0.00
		Droughty	0.93			Hard to reclaim (rock fragments)	0.08
Gogebic-----	25	Poor		Poor		Poor	
		Too acid	0.00	Wetness	0.00	Wetness	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to cemented pan	0.00
		Droughty	0.11			Rock fragments	0.98
						Too acid	0.98
691B: Dishno-----	35	Poor		Poor		Fair	
		Stone content	0.00	Stone content	0.00	Too sandy	0.03
		Too sandy	0.03	Depth to bedrock	0.23	Rock fragments	0.32
		Low content of organic matter	0.12	Wetness	0.53	Hard to reclaim (rock fragments)	0.50
		Too acid	0.50			Wetness	0.53
		Droughty	0.92				
Tula-----	30	Fair		Poor		Poor	
		Too acid	0.03	Wetness	0.00	Wetness	0.00
		Droughty	0.18	Depth to cemented pan	0.00	Rock fragments	0.01
		Depth to cemented pan	0.36	Cobble content	0.95	Depth to cemented pan	0.36
Rock outcrop-----	20	Not rated		Not rated		Not rated	
691D: Dishno-----	35	Poor		Poor		Poor	
		Stone content	0.00	Stone content	0.00	Slope	0.00
		Too sandy	0.03	Depth to bedrock	0.23	Too sandy	0.03
		Low content of organic matter	0.12	Wetness	0.53	Rock fragments	0.32
		Too acid	0.50	Slope	0.82	Hard to reclaim (rock fragments)	0.50
		Droughty	0.92			Wetness	0.53

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
691D: Tula-----	30	Fair Too acid Droughty Depth to cemented pan	 0.03 0.18 0.36	Poor Wetness Depth to cemented pan Cobble content	 0.00 0.00 0.95	Poor Wetness Rock fragments Depth to cemented pan	 0.00 0.01 0.36
Rock outcrop-----	20	Not rated		Not rated		Not rated	
693B: Chabeneau-----	50	Poor Low content of organic matter Too acid	 0.00 0.03	Fair Wetness	 0.14	Poor Hard to reclaim (rock fragments) Wetness Rock fragments Too acid	 0.00 0.14 0.82 0.95
Annalake-----	40	Poor Too acid Low content of organic matter Too sandy Water erosion	 0.00 0.12 0.20 0.99	Fair Wetness	 0.14	Fair Wetness Too sandy Too acid	 0.14 0.20 0.98
694D: Annalake-----	40	Poor Too acid Low content of organic matter Too sandy Water erosion	 0.00 0.12 0.20 0.99	Fair Wetness Slope	 0.14 0.92	Poor Slope Wetness Too sandy Too acid	 0.00 0.14 0.20 0.98
Stutts-----	35	Poor Too sandy Wind erosion Low content of organic matter Too acid Droughty	 0.00 0.00 0.06 0.50 0.99	Fair Slope	 0.92	Poor Too sandy Slope	 0.00 0.00
Arnheim-----	25	Fair Low content of organic matter Too acid Water erosion	 0.12 0.92 0.99	Poor Wetness	 0.00	Poor Wetness	 0.00
5170: Minocqua-----	50	Fair Low content of organic matter Too acid	 0.12 0.68	Poor Wetness	 0.00	Poor Wetness Rock fragments Hard to reclaim (rock fragments)	 0.00 0.12 0.68
Pleine-----	30	Fair Low content of organic matter Too acid	 0.12 0.50	Poor Wetness Stone content	 0.00 0.97	Poor Wetness Rock fragments Hard to reclaim (rock fragments)	 0.00 0.91 0.95

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
5170: Cathro-----	15	Fair Low content of organic matter	0.12	Poor Wetness	0.00	Poor Wetness High content of organic matter Hard to reclaim (rock fragments)	0.00 0.00 0.98
5171B: Tula-----	60	Fair Droughty Depth to cemented pan Too acid Low content of organic matter	0.14 0.36 0.54 0.88	Poor Wetness Depth to cemented pan	0.00 0.00	Poor Wetness Rock fragments Depth to cemented pan	0.00 0.25 0.36
Wormet-----	15	Poor Too sandy Low content of organic matter Too acid Droughty	0.00 0.12 0.50 0.76	Poor Wetness	0.00	Poor Too sandy Wetness Rock fragments Hard to reclaim (rock fragments)	0.00 0.00 0.00 0.46
Gogebic, sandy substratum-----	15	Poor Too acid Depth to cemented pan Droughty	0.00 0.00 0.11	Poor Wetness Depth to cemented pan	0.00 0.00	Poor Wetness Depth to cemented pan Rock fragments Too acid	0.00 0.00 0.98 0.98
5172B: Gogebic, sandy substratum-----	60	Poor Too acid Depth to cemented pan Droughty	0.00 0.00 0.11	Poor Wetness Depth to cemented pan	0.00 0.00	Poor Wetness Depth to cemented pan Rock fragments Too acid	0.00 0.00 0.98 0.98
Pence-----	15	Poor Too sandy Low content of organic matter Too acid Droughty	0.00 0.12 0.50 0.68	Good		Poor Too sandy Hard to reclaim (rock fragments)	0.00 0.08
Cathro-----	15	Fair Low content of organic matter	0.12	Poor Wetness	0.00	Poor Wetness High content of organic matter Hard to reclaim (rock fragments)	0.00 0.00 0.98

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
5172C: Gogebic, sandy substratum-----	60	Poor Too acid Depth to cemented pan Droughty	0.00 0.00 0.11	Poor Wetness Depth to cemented pan	0.00 0.00	Poor Wetness Depth to cemented pan Slope Rock fragments Too acid	0.00 0.00 0.37 0.98 0.98
Pence-----	15	Poor Too sandy Low content of organic matter Too acid Droughty	0.00 0.12 0.50 0.68	Good		Poor Too sandy Hard to reclaim (rock fragments) Slope	0.00 0.08 0.37
Cathro-----	15	Fair Low content of organic matter	0.12	Poor Wetness	0.00	Poor Wetness High content of organic matter Hard to reclaim (rock fragments)	0.00 0.00 0.98
5172D: Gogebic, sandy substratum-----	60	Poor Too acid Depth to cemented pan Droughty	0.00 0.00 0.11	Poor Wetness Depth to cemented pan Slope	0.00 0.00 0.00	Poor Slope Wetness Depth to cemented pan Rock fragments Too acid	0.00 0.00 0.00 0.98 0.98
Pence-----	15	Poor Too sandy Low content of organic matter Too acid Droughty	0.00 0.12 0.50 0.68	Poor Slope	0.00	Poor Slope Too sandy Hard to reclaim (rock fragments)	0.00 0.00 0.08
Cathro-----	15	Fair Low content of organic matter	0.12	Poor Wetness	0.00	Poor Wetness High content of organic matter Hard to reclaim (rock fragments)	0.00 0.00 0.98
5173D: Gogebic, sandy substratum-----	60	Poor Too acid Depth to cemented pan Droughty	0.00 0.00 0.11	Poor Wetness Depth to cemented pan Slope	0.00 0.00 0.00	Poor Slope Wetness Depth to cemented pan Rock fragments Too acid	0.00 0.00 0.00 0.98 0.98

Soil Survey of Gogebic County, Michigan

Table 14b.--Construction Materials--Continued

Map symbol and soil name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
5173D: Pence-----	30	Poor		Poor		Poor	
		Too sandy	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.12			Too sandy	0.00
		Too acid	0.50			Hard to reclaim	0.08
		Droughty	0.68			(rock fragments)	

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7:							
Histosols-----	60	Very limited Seepage	1.00	Very limited Organic matter content Ponding Depth to saturated zone Seepage Piping	1.00 1.00 1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
Aquents-----	40	Not limited		Very limited Ponding	1.00	Somewhat limited Cutbanks cave	0.10
10:							
Witbeck-----	90	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.01	Very limited Cutbanks cave	1.00
12A:							
Monico-----	100	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.03	Somewhat limited Depth to saturated zone Cutbanks cave	0.96 0.10
13B:							
Argonne-----	83	Very limited Seepage Depth to cemented pan	1.00 0.52	Very limited Depth to saturated zone Thin layer Seepage	1.00 0.52 0.04	Very limited Depth to water	1.00
13C:							
Argonne-----	83	Very limited Seepage Slope Depth to cemented pan	1.00 1.00 0.52	Very limited Depth to saturated zone Thin layer Seepage	1.00 0.52 0.04	Very limited Depth to water	1.00
13D:							
Argonne-----	86	Very limited Seepage Slope Depth to cemented pan	1.00 1.00 0.52	Very limited Depth to saturated zone Thin layer Seepage	1.00 0.52 0.04	Very limited Depth to water	1.00
15B:							
Wabeno-----	100	Very limited Seepage Depth to cemented pan	1.00 1.00	Very limited Thin layer Piping Depth to saturated zone Seepage	1.00 1.00 0.95 0.03	Very limited Depth to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
15C: Wabeno-----	100	Very limited Seepage Depth to cemented pan Slope	 1.00 1.00 1.00	Very limited Thin layer Piping Depth to saturated zone Seepage	 1.00 1.00 0.95 0.03	Very limited Depth to water	 1.00
16A: Fence-----	100	Somewhat limited Seepage	 0.72	Very limited Depth to saturated zone Piping	 1.00 1.00	Somewhat limited Cutbanks cave Slow refill	 0.50 0.28
17B: Lode-----	85	Very limited Seepage	 1.00	Somewhat limited Seepage	 0.64	Very limited Depth to water	 1.00
17C: Lode-----	86	Very limited Seepage Slope	 1.00 1.00	Somewhat limited Seepage	 0.64	Very limited Depth to water	 1.00
20B: Pence-----	62	Very limited Seepage	 1.00	Somewhat limited Seepage	 0.93	Very limited Depth to water	 1.00
Lode-----	30	Very limited Seepage	 1.00	Somewhat limited Seepage	 0.64	Very limited Depth to water	 1.00
20C: Pence-----	86	Very limited Seepage Slope	 1.00 1.00	Somewhat limited Seepage	 0.93	Very limited Depth to water	 1.00
21: Minocqua-----	60	Very limited Seepage	 1.00	Very limited Depth to saturated zone Ponding Seepage	 1.00 1.00 0.50	Very limited Cutbanks cave	 1.00
Leafriver-----	30	Very limited Seepage	 1.00	Very limited Depth to saturated zone Ponding Seepage	 1.00 1.00 0.48	Very limited Cutbanks cave	 1.00
23B: Chabeneau-----	57	Very limited Seepage	 1.00	Very limited Depth to saturated zone Seepage	 1.00 0.46	Very limited Cutbanks cave	 1.00
Karlin-----	28	Very limited Seepage	 1.00	Somewhat limited Seepage	 0.86	Very limited Depth to water	 1.00
Pence-----	15	Very limited Seepage	 1.00	Somewhat limited Seepage	 0.93	Very limited Depth to water	 1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
26B: Stambaugh-----	90	Very limited Seepage	1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
27: Lupton-----	50	Very limited Seepage	1.00	Very limited Organic matter content Depth to saturated zone Piping Ponding	1.00 1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
Tawas-----	48	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.86	Very limited Cutbanks cave	1.00
28: Dawson-----	40	Very limited Seepage	1.00	Very limited Organic matter content Depth to saturated zone Piping Ponding Seepage	1.00 1.00 1.00 1.00 0.19	Very limited Cutbanks cave	1.00
Greenwood-----	35	Very limited Seepage	1.00	Very limited Organic matter content Depth to saturated zone Piping Ponding	1.00 1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
Loxley-----	20	Very limited Seepage	1.00	Very limited Organic matter content Depth to saturated zone Piping Ponding	1.00 1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
29B: Pence, very deep water table-----	85	Very limited Seepage	1.00	Somewhat limited Seepage	0.93	Very limited Depth to water	1.00
31: Evart-----	55	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.61	Very limited Cutbanks cave	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31: Tawas-----	45	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.86	Very limited Cutbanks cave	1.00
32A: Net-----	100	Very limited Depth to cemented pan Seepage	1.00 1.00	Very limited Depth to saturated zone Thin layer Piping Seepage	1.00 1.00 1.00 0.02	Very limited Cutbanks cave	1.00
35A: Beechwood-----	85	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Seepage	1.00 0.02	Somewhat limited Slow refill Cutbanks cave	0.30 0.10
36: Gay-----	58	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.03	Somewhat limited Cutbanks cave	0.10
Pleine-----	30	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Seepage Large stones	1.00 1.00 0.04 0.01	Very limited Cutbanks cave Large stones	1.00 0.01
37B: Gogebic-----	51	Somewhat limited Depth to cemented pan Seepage Slope	1.00 0.70 0.08	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
Tula-----	31	Somewhat limited Depth to cemented pan Seepage	0.91 0.73	Very limited Depth to saturated zone Thin layer Seepage	1.00 0.91 0.07	Very limited Cutbanks cave Depth to saturated zone Slow refill	1.00 0.96 0.27
Lupton-----	15	Very limited Seepage	1.00	Very limited Organic matter content Depth to saturated zone Piping Ponding	1.00 1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
38B: Gogebic, sandy substratum-----	95	Very limited Seepage Depth to cemented pan Slope	 1.00 1.00 0.08	Very limited Depth to saturated zone Piping Thin layer Seepage	 1.00 1.00 1.00 0.24	Very limited Depth to water	1.00
38C: Gogebic, sandy substratum-----	95	Very limited Seepage Slope Depth to cemented pan	 1.00 1.00 1.00	Very limited Depth to saturated zone Piping Thin layer Seepage	 1.00 1.00 1.00 0.24	Very limited Depth to water	1.00
38D: Gogebic, sandy substratum-----	95	Very limited Seepage Slope Depth to cemented pan	 1.00 1.00 1.00	Very limited Depth to saturated zone Piping Thin layer Seepage	 1.00 1.00 1.00 0.24	Very limited Depth to water	1.00
39B: Gogebic, sandy substratum-----	85	Very limited Seepage Depth to cemented pan Slope	 1.00 1.00 0.08	Very limited Depth to saturated zone Piping Thin layer Seepage	 1.00 1.00 1.00 0.24	Very limited Depth to water	1.00
39C: Gogebic, sandy substratum-----	85	Very limited Seepage Slope Depth to cemented pan	 1.00 1.00 1.00	Very limited Depth to saturated zone Piping Thin layer Seepage	 1.00 1.00 1.00 0.24	Very limited Depth to water	1.00
39D: Gogebic, sandy substratum-----	85	Very limited Seepage Slope Depth to cemented pan	 1.00 1.00 1.00	Very limited Depth to saturated zone Piping Thin layer Seepage	 1.00 1.00 1.00 0.24	Very limited Depth to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
41:							
Lupton-----	60	Very limited Seepage	1.00	Very limited Organic matter content Depth to saturated zone Piping Ponding	1.00 1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
Pleine-----	23	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.04	Very limited Cutbanks cave	1.00
Cathro-----	15	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
42:							
Ausable-----	70	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.64	Very limited Cutbanks cave	1.00
Tawas-----	25	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.86	Very limited Cutbanks cave	1.00
43B:							
Karlin-----	55	Very limited Seepage Slope	1.00 0.08	Somewhat limited Seepage	0.91	Very limited Depth to water	1.00
Pence-----	40	Very limited Seepage Slope	1.00 0.08	Somewhat limited Seepage	0.93	Very limited Depth to water	1.00
43C:							
Karlin-----	55	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.91	Very limited Depth to water	1.00
Pence-----	40	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.93	Very limited Depth to water	1.00
43D:							
Karlin-----	55	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.91	Very limited Depth to water	1.00
Pence-----	40	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.93	Very limited Depth to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
44B:							
Karlin-----	36	Very limited Seepage Slope	1.00 0.32	Somewhat limited Seepage	0.91	Very limited Depth to water	1.00
Keweenaw-----	30	Somewhat limited Seepage	0.99	Somewhat limited Seepage	0.15	Very limited Depth to water	1.00
Saronia, dense substratum-----	25	Very limited Seepage Slope	1.00 0.32	Somewhat limited Seepage	0.10	Very limited Depth to water	1.00
44C:							
Karlin-----	36	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.91	Very limited Depth to water	1.00
Keweenaw-----	30	Very limited Slope Seepage	1.00 0.99	Somewhat limited Seepage	0.15	Very limited Depth to water	1.00
Saronia, dense substratum-----	25	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.10	Very limited Depth to water	1.00
44D:							
Karlin-----	36	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.91	Very limited Depth to water	1.00
Keweenaw-----	30	Very limited Slope Seepage	1.00 0.99	Somewhat limited Seepage	0.15	Very limited Depth to water	1.00
Saronia, dense substratum-----	25	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.10	Very limited Depth to water	1.00
46C:							
Amasa-----	54	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
Karlin-----	40	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.91	Very limited Depth to water	1.00
46D:							
Amasa-----	52	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
Karlin-----	38	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.91	Very limited Depth to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
46E:							
Amasa-----	52	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
Karlin-----	38	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.91	Very limited Depth to water	1.00
46F:							
Amasa-----	53	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
Karlin-----	37	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.86	Very limited Depth to water	1.00
47B:							
Karlin, very deep water table-----	41	Very limited Seepage	1.00	Somewhat limited Seepage	0.91	Very limited Depth to water	1.00
Noseum-----	35	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.93	Very limited Cutbanks cave Depth to saturated zone	1.00 0.01
Gay-----	16	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.03	Somewhat limited Cutbanks cave	0.10
48C:							
Karlin-----	75	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.91	Very limited Depth to water	1.00
Michigamme-----	20	Very limited Slope Depth to bedrock Seepage	1.00 0.83 0.72	Very limited Piping Thin layer	1.00 0.83	Very limited Depth to water	1.00
48F:							
Karlin-----	55	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.86	Very limited Depth to water	1.00
Michigamme-----	30	Very limited Slope Depth to bedrock Seepage	1.00 0.86 0.72	Very limited Piping Thin layer	1.00 0.86	Very limited Depth to water	1.00
49B:							
Pelissier-----	52	Very limited Seepage	1.00	Very limited Seepage	1.00	Very limited Depth to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
49B: Sarwet-----	35	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.06	Very limited Cutbanks cave	1.00
49C: Pelissier-----	50	Very limited Seepage Slope	1.00 1.00	Very limited Seepage	1.00	Very limited Depth to water	1.00
Sarwet-----	35	Very limited Slope Seepage	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 0.06	Very limited Cutbanks cave	1.00
49D: Pelissier-----	85	Very limited Seepage Slope	1.00 1.00	Very limited Seepage	1.00	Very limited Depth to water	1.00
52B: Pence-----	56	Very limited Seepage Slope	1.00 0.08	Somewhat limited Seepage	0.93	Very limited Depth to water	1.00
Vilas-----	35	Very limited Seepage	1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
52C: Pence-----	56	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.93	Very limited Depth to water	1.00
Vilas-----	35	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
53B: Manitowish-----	77	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.91	Very limited Cutbanks cave Depth to saturated zone	1.00 0.01
Croswell-----	22	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.91	Very limited Cutbanks cave Depth to saturated zone	1.00 0.01
57B: Karlin-----	70	Very limited Seepage Slope	1.00 0.08	Somewhat limited Seepage	0.86	Very limited Depth to water	1.00
Manitowish-----	20	Very limited Seepage Slope	1.00 0.08	Very limited Depth to saturated zone Seepage	1.00 0.91	Very limited Cutbanks cave Depth to saturated zone	1.00 0.01

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
57C: Karlin-----	75	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.86	Very limited Depth to water	1.00
Manitowish-----	16	Very limited Seepage Slope	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 0.91	Very limited Cutbanks cave Depth to saturated zone	1.00 0.01
58B: Vilas, very deep water table-----	40	Very limited Seepage	1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
Croswell-----	22	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.91	Very limited Cutbanks cave Depth to saturated zone	1.00 0.01
Pence, very deep water table-----	20	Very limited Seepage	1.00	Somewhat limited Seepage	0.93	Very limited Depth to water	1.00
61: Tawas-----	60	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.86	Very limited Cutbanks cave	1.00
Kinross-----	30	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.93	Very limited Cutbanks cave	1.00
62B: Pelkie-----	100	Very limited Seepage	1.00	Somewhat limited Seepage Depth to saturated zone	0.91 0.86	Very limited Cutbanks cave Depth to saturated zone	1.00 0.06
83: Bowstring-----	90	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding Seepage	1.00 1.00 1.00 0.61	Very limited Cutbanks cave	1.00
141D: Oldman-----	80	Very limited Seepage Slope Depth to cemented pan	1.00 1.00 0.99	Very limited Depth to saturated zone Thin layer Large stones Seepage	1.00 0.99 0.96 0.02	Very limited Depth to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
141E: Oldman-----	80	Very limited Seepage Slope Depth to cemented pan	 1.00 1.00 0.99	Very limited Depth to saturated zone Thin layer Large stones Seepage	 1.00 0.99 0.96 0.02	Very limited Depth to water	1.00
141F: Porkies-----	80	Very limited Slope Seepage Depth to cemented pan	 1.00 1.00 0.11	Somewhat limited Large stones Seepage Thin layer	 0.13 0.11 0.11	Very limited Depth to water	1.00
214B: Amnicon-----	60	Somewhat limited Slope	0.32	Very limited Depth to saturated zone Hard to pack	1.00 1.00	Very limited Depth to water	1.00
Bergland-----	30	Not limited		Very limited Depth to saturated zone Hard to pack Ponding	1.00 1.00 1.00	Very limited Depth to water	1.00
216B: Amnicon-----	85	Somewhat limited Slope	0.32	Very limited Depth to saturated zone Hard to pack	1.00 1.00	Very limited Depth to water	1.00
217A: Cuttre-----	85	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 1.00	Very limited Depth to water	1.00
218: Bergland-----	80	Not limited		Very limited Depth to saturated zone Hard to pack Ponding	1.00 1.00 1.00	Very limited Depth to water	1.00
219B: Payseor-----	50	Somewhat limited Seepage	0.95	Very limited Depth to saturated zone Seepage	1.00 0.84	Very limited Cutbanks cave Depth to saturated zone Slow refill	1.00 0.96 0.05
Froberg-----	40	Somewhat limited Seepage	0.19	Very limited Depth to saturated zone Seepage	1.00 0.04	Very limited Depth to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
222: Matchwood-----	85	Somewhat limited Seepage	0.02	Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.97	Somewhat limited Cutbanks cave	0.10
225A: Cuttre-----	50	Not limited		Very limited Depth to saturated zone Hard to pack	1.00 1.00	Very limited Depth to water	1.00
Bergland-----	40	Not limited		Very limited Depth to saturated zone Hard to pack Ponding	1.00 1.00 1.00	Very limited Depth to water	1.00
226B: Froberg-----	85	Somewhat limited Seepage	0.19	Very limited Depth to saturated zone Seepage	1.00 0.04	Very limited Depth to water	1.00
230B: Moquah-----	55	Somewhat limited Seepage	0.89	Somewhat limited Depth to saturated zone Seepage	0.09 0.04	Very limited Cutbanks cave Depth to saturated zone Slow refill	1.00 0.54 0.11
Arnheim-----	30	Somewhat limited Seepage	0.43	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Very limited Cutbanks cave Slow refill	1.00 0.05
231: Matchwood-----	45	Somewhat limited Seepage	0.02	Very limited Depth to saturated zone Ponding Hard to pack	1.00 1.00 0.97	Somewhat limited Cutbanks cave	0.10
Dorval-----	35	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage Ponding	1.00 1.00 1.00	Very limited Cutbanks cave	1.00
233: Schaat Creek-----	90	Not limited		Very limited Depth to saturated zone Piping	1.00 0.62	Somewhat limited Slow refill Cutbanks cave	0.99 0.10
239D: Miskoaki-----	85	Very limited Slope	1.00	Very limited Hard to pack	1.00	Very limited Depth to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
277B: Kellogg, sandy substratum-----	50	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.24	Very limited Depth to water	1.00
Allendale-----	35	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping	1.00 0.02	Very limited Depth to water	1.00
280B: Flintsteel-----	85	Somewhat limited Seepage	0.02	Very limited Depth to saturated zone Piping Thin layer	1.00 1.00 0.66	Somewhat limited Slow refill Cutbanks cave	0.95 0.10
280C: Flintsteel-----	85	Very limited Slope Seepage	1.00 0.02	Very limited Depth to saturated zone Piping Thin layer	1.00 1.00 0.66	Somewhat limited Slow refill Cutbanks cave	0.95 0.10
282B: Big Iron-----	70	Somewhat limited Seepage	0.03	Very limited Depth to saturated zone Piping Thin layer	1.00 1.00 0.19	Very limited Depth to water Slow refill	1.00 1.00
Flintsteel-----	20	Somewhat limited Seepage	0.02	Very limited Depth to saturated zone Piping Thin layer	1.00 1.00 0.66	Somewhat limited Slow refill Cutbanks cave	0.95 0.10
283B: Loggerhead-----	40	Somewhat limited Seepage	0.57	Very limited Depth to saturated zone Piping	1.00 1.00	Very limited Cutbanks cave Depth to saturated zone Slow refill	1.00 0.96 0.95
Noseum-----	30	Very limited Seepage Slope	1.00 0.08	Very limited Depth to saturated zone Seepage	1.00 0.93	Very limited Cutbanks cave Depth to saturated zone	1.00 0.01
Ubyl-----	20	Somewhat limited Slope Seepage	0.68 0.05	Very limited Piping	1.00	Very limited Depth to water	1.00
283C: Loggerhead-----	40	Very limited Slope Seepage	1.00 0.57	Very limited Depth to saturated zone Piping	1.00 1.00	Very limited Cutbanks cave Depth to saturated zone Slow refill	1.00 0.96 0.95

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
283C: Noseum-----	30	Very limited Seepage Slope	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 0.93	Very limited Cutbanks cave Depth to saturated zone	1.00 0.01
Ubly-----	20	Very limited Slope Seepage	1.00 0.05	Very limited Piping	1.00	Very limited Depth to water	1.00
284: Aquents-----	55	Not limited		Very limited Ponding	1.00	Somewhat limited Cutbanks cave	0.10
Gull Point-----	40	Somewhat limited Seepage	0.30	Very limited Depth to saturated zone Piping Thin layer	1.00 0.81 0.46	Somewhat limited Cutbanks cave	0.10
285F: Rockland-----	70	Very limited Slope Seepage	1.00 0.03	Very limited Piping	1.00	Very limited Depth to water	1.00
Arnheim-----	15	Somewhat limited Seepage	0.43	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Very limited Cutbanks cave Slow refill	1.00 0.05
286A: Big Iron-----	65	Somewhat limited Seepage	0.03	Very limited Depth to saturated zone Piping Thin layer	1.00 1.00 0.19	Very limited Depth to water Slow refill	1.00 1.00
Belding-----	20	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Thin layer	1.00 1.00 0.74	Very limited Depth to water	1.00
287: Trap Falls-----	55	Somewhat limited Seepage	0.01	Very limited Depth to saturated zone Ponding Piping Thin layer	1.00 1.00 0.67 0.02	Somewhat limited Cutbanks cave	0.10
Tonkey-----	35	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Piping Ponding Seepage	1.00 1.00 1.00 0.01	Very limited Cutbanks cave Slow refill	1.00 0.28

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
289B: Amasa-----	95	Very limited Seepage	1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
290B: Flintsteel-----	80	Somewhat limited Seepage	0.02	Very limited Depth to saturated zone Piping Thin layer	1.00 1.00 0.66	Somewhat limited Slow refill Cutbanks cave	0.95 0.10
290C: Flintsteel-----	85	Very limited Slope Seepage	1.00 0.02	Very limited Depth to saturated zone Piping Thin layer	1.00 1.00 0.66	Somewhat limited Slow refill Cutbanks cave	0.95 0.10
291B: Kalkaska-----	80	Very limited Seepage	1.00	Somewhat limited Seepage	0.96	Very limited Depth to water	1.00
291D: Kalkaska-----	85	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.96	Very limited Depth to water	1.00
292B: Manido-----	45	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.48	Very limited Cutbanks cave Depth to saturated zone	1.00 0.01
Richter-----	40	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Seepage	1.00 0.03	Very limited Cutbanks cave Slow refill	1.00 0.30
293A: Wainola-----	55	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.36	Very limited Cutbanks cave	1.00
Trap Falls-----	25	Somewhat limited Seepage	0.01	Very limited Depth to saturated zone Ponding Piping Thin layer	1.00 1.00 0.67 0.02	Somewhat limited Cutbanks cave	0.10
296B: Manido-----	35	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.48	Very limited Cutbanks cave Depth to saturated zone	1.00 0.01

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
296B: Fence-----	30	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Piping	1.00 1.00	Somewhat limited Cutbanks cave Slow refill	0.50 0.28
Gogebic, sandy substratum-----	20	Very limited Seepage Depth to cemented pan	1.00 1.00	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.24	Very limited Depth to water	1.00
296D: Manido-----	35	Very limited Seepage Slope	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 0.48	Very limited Cutbanks cave Depth to saturated zone	1.00 0.01
Sporley-----	30	Very limited Slope Seepage	1.00 0.04	Very limited Piping	1.00	Very limited Depth to water	1.00
Gogebic, sandy substratum-----	20	Very limited Seepage Slope Depth to cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.24	Very limited Depth to water	1.00
299B: Zandi-----	40	Somewhat limited Seepage Slope	0.70 0.08	Not limited		Very limited Depth to water	1.00
Amasa-----	30	Very limited Seepage	1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
Flintsteel-----	20	Somewhat limited Seepage	0.02	Very limited Depth to saturated zone Piping Thin layer	1.00 1.00 0.66	Somewhat limited Slow refill Cutbanks cave	0.98 0.10
299C: Zandi-----	40	Very limited Slope Seepage	1.00 0.70	Not limited		Very limited Depth to water	1.00
Amasa-----	30	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
Flintsteel-----	20	Very limited Slope Seepage	1.00 0.02	Very limited Depth to saturated zone Piping Thin layer	1.00 1.00 0.66	Somewhat limited Slow refill Cutbanks cave	0.98 0.10

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
301A: Moodig-----	86	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Seepage	1.00 0.10	Very limited Depth to water	1.00
302B: Manitowish-----	85	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.91	Very limited Cutbanks cave Depth to saturated zone	1.00 0.01
302C: Manitowish-----	85	Very limited Seepage Slope	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 0.91	Very limited Cutbanks cave Depth to saturated zone	1.00 0.01
303: Bowstring-----	50	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding Seepage	1.00 1.00 1.00 0.61	Very limited Cutbanks cave	1.00
Arnheim-----	40	Somewhat limited Seepage	0.43	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Very limited Cutbanks cave Slow refill	1.00 0.05
305B: Keweenaw-----	45	Somewhat limited Seepage	0.99	Somewhat limited Seepage	0.15	Very limited Depth to water	1.00
Siskiwit-----	40	Very limited Seepage Slope	1.00 0.32	Very limited Depth to saturated zone Seepage	1.00 0.91	Very limited Cutbanks cave Depth to saturated zone	1.00 0.01
305C: Keweenaw-----	45	Very limited Slope Seepage	1.00 0.99	Somewhat limited Seepage	0.15	Very limited Depth to water	1.00
Siskiwit-----	40	Very limited Seepage Slope	1.00 0.68	Very limited Depth to saturated zone Seepage	1.00 0.91	Very limited Cutbanks cave Depth to saturated zone	1.00 0.01
307: Lupton-----	45	Very limited Seepage	1.00	Very limited Organic matter content Depth to saturated zone Piping Ponding	1.00 1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
307: Cathro-----	45	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
309: Cathro-----	85	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
310B: Gogebic-----	92	Somewhat limited Depth to cemented pan Seepage Slope	1.00 0.70 0.08	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
310C: Gogebic-----	92	Very limited Slope Depth to cemented pan Seepage	1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
310D: Gogebic-----	92	Very limited Slope Depth to cemented pan Seepage	1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
310E: Schweitzer-----	90	Very limited Slope Depth to cemented pan Seepage	1.00 1.00 0.74	Very limited Piping Thin layer Large stones Seepage	1.00 1.00 0.32 0.09	Very limited Depth to water	1.00
311B: Tula-----	45	Somewhat limited Depth to cemented pan Seepage	0.91 0.73	Very limited Depth to saturated zone Thin layer Seepage	1.00 0.91 0.07	Very limited Cutbanks cave Depth to saturated zone Slow refill	1.00 0.96 0.27
Gogebic-----	40	Somewhat limited Depth to cemented pan Seepage Slope	1.00 0.70 0.08	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
312A: Tula-----	35	Somewhat limited Depth to cemented pan Seepage	0.91 0.73	Very limited Depth to saturated zone Thin layer Seepage	1.00 0.91 0.07	Very limited Cutbanks cave Depth to saturated zone Slow refill	1.00 0.96 0.27
Foxpaw-----	30	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.03	Very limited Cutbanks cave	1.00
Gay-----	25	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.03	Somewhat limited Cutbanks cave	0.10
316: Gay-----	85	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.03	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
317B: Gogebic-----	95	Somewhat limited Depth to cemented pan Seepage Slope	1.00 0.70 0.08	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
317C: Gogebic-----	90	Very limited Slope Depth to cemented pan Seepage	1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
317D: Gogebic-----	88	Very limited Slope Depth to cemented pan Seepage	1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
319B: McMillan-----	45	Very limited Seepage	1.00	Somewhat limited Seepage	0.96	Very limited Depth to water	1.00
Noseum-----	40	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.93	Very limited Cutbanks cave Depth to saturated zone	1.00 0.01

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
319C: McMillan-----	45	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.96	Very limited Depth to water	1.00
Islandlake-----	40	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.86	Very limited Depth to water	1.00
319D: McMillan-----	45	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.96	Very limited Depth to water	1.00
Islandlake-----	40	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.86	Very limited Depth to water	1.00
319E: McMillan-----	45	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.96	Very limited Depth to water	1.00
Islandlake-----	40	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.86	Very limited Depth to water	1.00
322B: Stutts-----	60	Very limited Seepage	1.00	Somewhat limited Seepage	0.46	Very limited Depth to water	1.00
Keweenaw-----	30	Somewhat limited Seepage	0.99	Somewhat limited Seepage	0.15	Very limited Depth to water	1.00
322C: Stutts-----	60	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.46	Very limited Depth to water	1.00
Keweenaw-----	30	Very limited Slope Seepage	1.00 0.99	Somewhat limited Seepage	0.15	Very limited Depth to water	1.00
322D: Stutts-----	60	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.46	Very limited Depth to water	1.00
Keweenaw-----	30	Very limited Slope Seepage	1.00 0.99	Somewhat limited Seepage	0.15	Very limited Depth to water	1.00
323B: Keweenaw-----	50	Somewhat limited Seepage	0.99	Somewhat limited Seepage	0.15	Very limited Depth to water	1.00
Kalkaska-----	40	Very limited Seepage	1.00	Somewhat limited Seepage	0.96	Very limited Depth to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
323C:							
Keweenaw-----	50	Very limited Slope Seepage	1.00 0.99	Somewhat limited Seepage	0.15	Very limited Depth to water	1.00
Kalkaska-----	40	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.96	Very limited Depth to water	1.00
323D:							
Keweenaw-----	50	Very limited Slope Seepage	1.00 0.99	Somewhat limited Seepage	0.15	Very limited Depth to water	1.00
Kalkaska-----	40	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.96	Very limited Depth to water	1.00
325B:							
Siskiwit-----	55	Very limited Seepage Slope	1.00 0.32	Very limited Depth to saturated zone Seepage	1.00 0.91	Very limited Cutbanks cave Depth to saturated zone	1.00 0.01
Gogebic-----	45	Somewhat limited Depth to cemented pan Seepage	1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
325C:							
Siskiwit-----	55	Very limited Seepage Slope	1.00 0.68	Very limited Depth to saturated zone Seepage	1.00 0.91	Very limited Cutbanks cave Depth to saturated zone	1.00 0.01
Gogebic-----	45	Very limited Slope Depth to cemented pan Seepage	1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
327:							
Foxpaw-----	60	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.03	Very limited Cutbanks cave	1.00
Sarwet-----	40	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.06	Very limited Cutbanks cave	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
328B: Annalake-----	50	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone	1.00	Very limited Cutbanks cave Slow refill	1.00 0.30
Karlin-----	36	Very limited Seepage Slope	1.00 0.08	Somewhat limited Seepage	0.91	Very limited Depth to water	1.00
328C: Annalake-----	50	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone	1.00	Very limited Cutbanks cave Slow refill	1.00 0.30
Karlin-----	40	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.91	Very limited Depth to water	1.00
328D: Karlin-----	50	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.86	Very limited Depth to water	1.00
Zandi-----	45	Very limited Slope Seepage	1.00 0.70	Not limited		Very limited Depth to water	1.00
329A: Tula-----	90	Somewhat limited Depth to cemented pan Seepage	0.91 0.73	Very limited Depth to saturated zone Thin layer Seepage	1.00 0.91 0.07	Very limited Cutbanks cave Depth to saturated zone Slow refill	1.00 0.96 0.27
351B: Gogebic-----	85	Somewhat limited Depth to cemented pan Seepage Slope	1.00 0.70 0.08	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
351C: Gogebic-----	85	Very limited Slope Depth to cemented pan Seepage	1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
351D: Gogebic-----	85	Very limited Slope Depth to cemented pan Seepage	1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
351E: Schweitzer-----	85	Very limited Slope Depth to cemented pan Seepage	 1.00 1.00 0.70	Very limited Piping Thin layer Large stones Seepage	 1.00 1.00 0.22 0.09	Very limited Depth to water	 1.00
351F: Schweitzer-----	90	Very limited Slope Depth to cemented pan Seepage	 1.00 1.00 0.70	Very limited Piping Thin layer Large stones Seepage	 1.00 1.00 0.22 0.09	Very limited Depth to water	 1.00
353A: Tula-----	85	Somewhat limited Depth to cemented pan Seepage	 0.91 0.73	Very limited Depth to saturated zone Thin layer Seepage	 1.00 0.91 0.07	Very limited Cutbanks cave Depth to saturated zone Slow refill	 1.00 0.96 0.27
354B: Gogebic-----	90	Somewhat limited Depth to cemented pan Seepage Slope	 1.00 0.70 0.08	Very limited Depth to saturated zone Piping Thin layer Seepage	 1.00 1.00 1.00 0.01	Very limited Depth to water	 1.00
354C: Gogebic-----	90	Very limited Slope Depth to cemented pan Seepage	 1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	 1.00 1.00 1.00 0.01	Very limited Depth to water	 1.00
354D: Gogebic-----	85	Very limited Slope Depth to cemented pan Seepage	 1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	 1.00 1.00 1.00 0.01	Very limited Depth to water	 1.00
354E: Schweitzer-----	85	Very limited Slope Depth to cemented pan Seepage	 1.00 1.00 0.74	Very limited Piping Thin layer Large stones Seepage	 1.00 1.00 0.32 0.09	Very limited Depth to water	 1.00
354F: Schweitzer-----	90	Very limited Slope Depth to cemented pan Seepage	 1.00 1.00 0.74	Very limited Piping Thin layer Large stones Seepage	 1.00 1.00 0.32 0.09	Very limited Depth to water	 1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
363C:							
Talus-----	50	Not rated		Not rated		Not rated	
Arcadian-----	35	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Thin layer Seepage	1.00 0.03	Very limited Depth to water	1.00
363D:							
Talus-----	46	Not rated		Not rated		Not rated	
Arcadian-----	35	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Thin layer Seepage	1.00 0.03	Very limited Depth to water	1.00
363E:							
Talus-----	50	Not rated		Not rated		Not rated	
Arcadian-----	35	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Thin layer Seepage	1.00 0.03	Very limited Depth to water	1.00
363F:							
Talus-----	50	Not rated		Not rated		Not rated	
Arcadian-----	35	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Thin layer Seepage	1.00 0.03	Very limited Depth to water	1.00
364F:							
Talus-----	91	Not rated		Not rated		Not rated	
365F:							
Rock outcrop-----	90	Not rated		Not rated		Not rated	
369C:							
Dishno-----	35	Very limited Seepage Slope Depth to bedrock	1.00 1.00 0.22	Very limited Depth to saturated zone Thin layer Seepage Large stones	1.00 0.22 0.15 0.08	Very limited Cutbanks cave Depth to hard bedrock Large stones Depth to saturated zone	1.00 0.77 0.08 0.01
Gogebic-----	30	Very limited Slope Depth to cemented pan Seepage	1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
Peshekee-----	15	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Thin layer Piping Large stones	1.00 1.00 0.02	Very limited Depth to water	1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
369D: Dishno-----	35	Very limited Seepage Slope Depth to bedrock	 1.00 1.00 0.22	Very limited Depth to saturated zone Thin layer Seepage Large stones	 1.00 0.22 0.15 0.08	Very limited Cutbanks cave Depth to hard bedrock Large stones Depth to saturated zone	 1.00 0.77 0.08 0.01
Gogebic-----	30	Very limited Slope Depth to cemented pan Seepage	 1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	 1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
Peshekee-----	15	Very limited Slope Depth to bedrock	 1.00 1.00	Very limited Thin layer Piping Large stones	 1.00 1.00 0.02	Very limited Depth to water	1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
369E: Michigamme-----	30	Very limited Slope Depth to bedrock Seepage	 1.00 0.83 0.72	Very limited Piping Thin layer	 1.00 0.83	Very limited Depth to water	1.00
Schweitzer-----	25	Very limited Slope Depth to cemented pan Seepage	 1.00 1.00 0.74	Very limited Piping Thin layer Large stones Seepage	 1.00 1.00 0.32 0.09	Very limited Depth to water	1.00
Peshekee-----	20	Very limited Slope Depth to bedrock	 1.00 1.00	Very limited Thin layer Piping Large stones	 1.00 1.00 0.02	Very limited Depth to water	1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
369F: Michigamme-----	30	Very limited Slope Depth to bedrock Seepage	 1.00 0.83 0.72	Very limited Piping Thin layer	 1.00 0.83	Very limited Depth to water	1.00
Schweitzer-----	25	Very limited Slope Depth to cemented pan Seepage	 1.00 1.00 0.74	Very limited Piping Thin layer Large stones Seepage	 1.00 1.00 0.32 0.09	Very limited Depth to water	1.00
Peshekee-----	20	Very limited Slope Depth to bedrock	 1.00 1.00	Very limited Thin layer Piping Large stones	 1.00 1.00 0.02	Very limited Depth to water	1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
370E: Peshekee-----	55	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Thin layer Piping Large stones	1.00 1.00 0.02	Very limited Depth to water	1.00
Rock outcrop-----	40	Not rated		Not rated		Not rated	
370F: Peshekee-----	55	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Thin layer Piping Large stones	1.00 1.00 0.02	Very limited Depth to water	1.00
Rock outcrop-----	40	Not rated		Not rated		Not rated	
375: Dumps and Pits, mine	95	Not rated		Not rated		Not rated	
380: Beseman-----	55	Very limited Seepage	1.00	Very limited Organic matter content Depth to saturated zone Piping Ponding	1.00 1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
Greenwood-----	40	Very limited Seepage	1.00	Very limited Organic matter content Depth to saturated zone Piping Ponding	1.00 1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
382: Cathro-----	45	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
Arnheim-----	44	Somewhat limited Seepage	0.43	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Very limited Cutbanks cave Slow refill	1.00 0.05
388: Gay-----	50	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.03	Somewhat limited Cutbanks cave	0.10

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
388: Tula-----	40	Somewhat limited Depth to cemented pan Seepage	0.91 0.73	Very limited Depth to saturated zone Thin layer Seepage	1.00 0.91 0.07	Very limited Cutbanks cave Depth to saturated zone Slow refill	1.00 0.96 0.27
398B: Tula-----	50	Somewhat limited Depth to cemented pan Seepage	0.91 0.73	Very limited Depth to saturated zone Thin layer Seepage	1.00 0.91 0.07	Very limited Cutbanks cave Depth to saturated zone Slow refill	1.00 0.96 0.27
Gay-----	30	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.03	Somewhat limited Cutbanks cave	0.10
Wakefield-----	15	Very limited Depth to cemented pan Seepage	1.00 0.70	Very limited Depth to saturated zone Thin layer Piping Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
418: Loxley-----	45	Very limited Seepage	1.00	Very limited Organic matter content Depth to saturated zone Piping Ponding	1.00 1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
Beseman-----	41	Very limited Seepage	1.00	Very limited Organic matter content Depth to saturated zone Piping Ponding	1.00 1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
419: Pleine-----	45	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.04	Very limited Cutbanks cave	1.00
Cathro-----	30	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
419: Gay-----	25	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.03	Somewhat limited Cutbanks cave	0.10
424: Gay-----	85	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.03	Somewhat limited Cutbanks cave	0.10
425: Foxpaw-----	45	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.03	Very limited Cutbanks cave	1.00
Gay-----	40	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.03	Somewhat limited Cutbanks cave	0.10
428C: Gogebic-----	70	Very limited Slope Depth to cemented pan Seepage	1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
Michigamme-----	25	Very limited Slope Depth to bedrock Seepage	1.00 0.86 0.72	Very limited Piping Thin layer	1.00 0.86	Very limited Depth to water	1.00
428D: Gogebic-----	70	Very limited Slope Depth to cemented pan Seepage	1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
Michigamme-----	25	Very limited Slope Depth to bedrock Seepage	1.00 0.86 0.72	Very limited Piping Thin layer	1.00 0.86	Very limited Depth to water	1.00
429B: Gogebic-----	79	Somewhat limited Depth to cemented pan Seepage	1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
429B: Peshekee-----	15	Very limited Depth to bedrock	1.00	Very limited Thin layer Piping Large stones	1.00 1.00 0.02	Very limited Depth to water	1.00
429C: Gogebic-----	79	Very limited Slope Depth to cemented pan Seepage	1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
Peshekee-----	15	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Thin layer Piping Large stones	1.00 1.00 0.02	Very limited Depth to water	1.00
429D: Gogebic-----	75	Very limited Slope Depth to cemented pan Seepage	1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
Peshekee-----	15	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Thin layer Piping Large stones	1.00 1.00 0.02	Very limited Depth to water	1.00
429E: Schweitzer-----	60	Very limited Slope Depth to cemented pan Seepage	1.00 1.00 0.74	Very limited Piping Thin layer Large stones Seepage	1.00 1.00 0.32 0.09	Very limited Depth to water	1.00
Peshekee-----	35	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Thin layer Piping Large stones	1.00 1.00 0.02	Very limited Depth to water	1.00
430B: Stutts-----	90	Very limited Seepage	1.00	Somewhat limited Seepage	0.46	Very limited Depth to water	1.00
430C: Stutts-----	90	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.46	Very limited Depth to water	1.00
430D: Stutts-----	90	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.46	Very limited Depth to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
430E: Stutts-----	90	Very limited Seepage Slope	 1.00 1.00	Somewhat limited Seepage	 0.46	Very limited Depth to water	 1.00
432C: Gogebic-----	68	Very limited Slope Depth to cemented pan Seepage	 1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	 1.00 1.00 1.00 0.01	Very limited Depth to water	 1.00
Michigamme-----	15	Very limited Slope Depth to bedrock Seepage	 1.00 0.83 0.72	Very limited Piping Thin layer	 1.00 0.83	Very limited Depth to water	 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
432D: Gogebic-----	68	Very limited Slope Depth to cemented pan Seepage	 1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	 1.00 1.00 1.00 0.01	Very limited Depth to water	 1.00
Michigamme-----	15	Very limited Seepage Slope Depth to bedrock	 1.00 1.00 0.83	Very limited Piping Thin layer	 1.00 0.83	Very limited Depth to water	 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
432E: Schweitzer-----	45	Very limited Slope Depth to cemented pan Seepage	 1.00 1.00 0.74	Very limited Piping Thin layer Large stones Seepage	 1.00 1.00 0.32 0.09	Very limited Depth to water	 1.00
Michigamme-----	20	Very limited Seepage Slope Depth to bedrock	 1.00 1.00 0.86	Very limited Piping Thin layer	 1.00 0.86	Very limited Depth to water	 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
432F: Schweitzer-----	45	Very limited Slope Depth to cemented pan Seepage	 1.00 1.00 0.70	Very limited Piping Thin layer Large stones Seepage	 1.00 1.00 0.32 0.09	Very limited Depth to water	 1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
432F: Michigamme-----	20	Very limited Seepage Slope Depth to bedrock	 1.00 1.00 0.86	Very limited Piping Thin layer	 1.00 0.86	Very limited Depth to water	 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
433B: McMillan-----	85	Very limited Seepage	 1.00	Somewhat limited Seepage	 0.96	Very limited Depth to water	 1.00
433C: McMillan-----	85	Very limited Seepage Slope	 1.00 1.00	Somewhat limited Seepage	 0.96	Very limited Depth to water	 1.00
433D: McMillan-----	85	Very limited Seepage Slope	 1.00 1.00	Somewhat limited Seepage	 0.96	Very limited Depth to water	 1.00
435C: Kalkaska-----	45	Very limited Seepage Slope	 1.00 1.00	Somewhat limited Seepage	 0.96	Very limited Depth to water	 1.00
Waiska-----	40	Very limited Seepage Slope	 1.00 1.00	Somewhat limited Seepage	 0.64	Very limited Depth to water	 1.00
435D: Kalkaska-----	45	Very limited Seepage Slope	 1.00 1.00	Somewhat limited Seepage	 0.96	Very limited Depth to water	 1.00
Waiska-----	40	Very limited Seepage Slope	 1.00 1.00	Somewhat limited Seepage	 0.64	Very limited Depth to water	 1.00
435E: Kalkaska-----	45	Very limited Seepage Slope	 1.00 1.00	Somewhat limited Seepage	 0.96	Very limited Depth to water	 1.00
Waiska-----	40	Very limited Seepage Slope	 1.00 1.00	Somewhat limited Seepage	 0.64	Very limited Depth to water	 1.00
437B: Manitowish-----	65	Very limited Seepage	 1.00	Very limited Depth to saturated zone Seepage	 1.00 0.91	Very limited Cutbanks cave Depth to saturated zone	 1.00 0.01
Channing-----	20	Very limited Seepage	 1.00	Very limited Depth to saturated zone Seepage	 1.00 0.82	Very limited Cutbanks cave	 1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
448F: Rockland-----	75	Very limited Slope Seepage	1.00 0.03	Very limited Piping	1.00	Very limited Depth to water	1.00
Rock outcrop-----	25	Not rated		Not rated		Not rated	
449C: Flintsteel-----	70	Very limited Slope Seepage	1.00 0.02	Very limited Depth to saturated zone Piping Thin layer	1.00 1.00 0.66	Somewhat limited Slow refill Cutbanks cave	0.98 0.10
Minocqua-----	30	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.50	Very limited Cutbanks cave	1.00
452F: Rockland-----	90	Very limited Slope Seepage	1.00 0.03	Very limited Piping	1.00	Very limited Depth to water	1.00
460B: Belding-----	55	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping	1.00 0.44	Very limited Depth to water	1.00
Manido-----	25	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.48	Very limited Cutbanks cave Depth to saturated zone	1.00 0.01
461B: Loggerhead-----	85	Somewhat limited Seepage	0.57	Very limited Depth to saturated zone Piping	1.00 1.00	Very limited Cutbanks cave Depth to saturated zone Slow refill	1.00 0.96 0.95
462C: Nonesuch-----	75	Very limited Slope Depth to cemented pan Seepage Depth to bedrock	1.00 0.99 0.30 0.10	Very limited Depth to saturated zone Thin layer	1.00 0.99	Very limited Cutbanks cave Slow refill Depth to hard bedrock	1.00 0.70 0.42
Rock outcrop-----	15	Not rated		Not rated		Not rated	
509: Cathro-----	45	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
509: Minocqua-----	40	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.50	Very limited Cutbanks cave	1.00
511A: Gogebic-----	40	Somewhat limited Depth to cemented pan Seepage Slope	1.00 0.70 0.08	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
Tula-----	30	Somewhat limited Depth to cemented pan Seepage	0.91 0.73	Very limited Depth to saturated zone Thin layer Seepage	1.00 0.91 0.07	Very limited Cutbanks cave Depth to saturated zone Slow refill	1.00 0.96 0.27
Chabeneau-----	15	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.46	Very limited Cutbanks cave	1.00
519B: Gogebic-----	50	Somewhat limited Depth to cemented pan Seepage	1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
Karlin-----	40	Very limited Seepage	1.00	Somewhat limited Seepage	0.86	Very limited Depth to water	1.00
519C: Gogebic-----	50	Very limited Slope Depth to cemented pan Seepage	1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
Karlin-----	40	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.86	Very limited Depth to water	1.00
519D: Gogebic-----	50	Very limited Slope Depth to cemented pan Seepage	1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
Karlin-----	40	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.86	Very limited Depth to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
522: Pits, sand and gravel-----	100	Not rated		Not rated		Not rated	
523D: Gogebic, sandy substratum-----	53	Very limited Seepage Slope Depth to cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.24	Very limited Depth to water	1.00
Karlin-----	40	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.86	Very limited Depth to water	1.00
524C: Waiska-----	45	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
Amasa-----	40	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
524D: Waiska-----	45	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
Amasa-----	40	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
524E: Waiska-----	45	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
Amasa-----	40	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
527B: Wakefield-----	85	Very limited Depth to cemented pan Seepage	1.00 0.72	Very limited Depth to saturated zone Thin layer Piping Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
527C: Wakefield-----	85	Very limited Depth to cemented pan Slope Seepage	1.00 1.00 0.72	Very limited Depth to saturated zone Thin layer Piping Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
527D: Wakefield-----	85	Very limited Slope Depth to cemented pan Seepage	1.00 1.00 0.72	Very limited Depth to saturated zone Thin layer Piping Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
528B: Gogebic-----	48	Somewhat limited Depth to cemented pan Seepage	1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
Annalake-----	45	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone	1.00	Very limited Cutbanks cave Slow refill	1.00 0.30
528C: Gogebic-----	48	Very limited Slope Depth to cemented pan Seepage	1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
Annalake-----	45	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone	1.00	Very limited Cutbanks cave Slow refill	1.00 0.30
528D: Gogebic-----	48	Very limited Slope Depth to cemented pan Seepage	1.00 1.00 0.70	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
Annalake-----	45	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone	1.00	Very limited Cutbanks cave Slow refill	1.00 0.30
551B: Gogebic-----	65	Somewhat limited Depth to cemented pan Seepage Slope	1.00 0.70 0.08	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00
Dishno-----	30	Very limited Seepage Depth to bedrock	1.00 0.37	Very limited Depth to saturated zone Thin layer Seepage Large stones	1.00 0.37 0.15 0.08	Very limited Cutbanks cave Depth to hard bedrock Large stones Depth to saturated zone	1.00 0.96 0.08 0.01

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
566: Beach, rubbly-----	95	Not rated		Not rated		Not rated	
576B: Flintsteel-----	45	Somewhat limited Seepage	0.02	Very limited Depth to saturated zone Piping Thin layer	1.00 1.00 0.66	Somewhat limited Slow refill Cutbanks cave	0.98 0.10
Loggerhead-----	40	Somewhat limited Seepage	0.57	Very limited Depth to saturated zone Piping	1.00 1.00	Very limited Cutbanks cave Slow refill	1.00 0.43
576C: Flintsteel-----	45	Very limited Slope Seepage	1.00 0.02	Very limited Depth to saturated zone Piping Thin layer	1.00 1.00 0.66	Somewhat limited Slow refill Cutbanks cave	0.98 0.10
Loggerhead-----	40	Very limited Slope Seepage	1.00 0.57	Very limited Depth to saturated zone Piping	1.00 1.00	Very limited Cutbanks cave Slow refill	1.00 0.43
576D: Flintsteel-----	45	Very limited Slope Seepage	1.00 0.02	Very limited Depth to saturated zone Piping Thin layer	1.00 1.00 0.66	Somewhat limited Slow refill Cutbanks cave	0.98 0.10
Loggerhead-----	40	Very limited Slope Seepage	1.00 0.57	Very limited Depth to saturated zone Piping	1.00 1.00	Very limited Cutbanks cave Slow refill	1.00 0.43
577B: Loggerhead-----	35	Somewhat limited Seepage	0.57	Very limited Depth to saturated zone Piping	1.00 1.00	Very limited Cutbanks cave Slow refill	1.00 0.43
Chabeneau-----	30	Very limited Seepage Slope	1.00 0.08	Very limited Depth to saturated zone Seepage	1.00 0.46	Very limited Cutbanks cave	1.00
Arcadian-----	25	Very limited Depth to bedrock	1.00	Very limited Thin layer Seepage	1.00 0.03	Very limited Depth to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
577C:							
Loggerhead-----	35	Very limited Slope Seepage	1.00 0.57	Very limited Depth to saturated zone Piping	1.00 1.00	Very limited Cutbanks cave Slow refill	1.00 0.43
Chabeneau-----	30	Very limited Seepage Slope	1.00 0.68	Very limited Depth to saturated zone Seepage	1.00 0.46	Very limited Cutbanks cave	1.00
Arcadian-----	25	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Thin layer Seepage	1.00 0.03	Very limited Depth to water	1.00
577D:							
Loggerhead-----	35	Very limited Slope Seepage	1.00 0.57	Very limited Depth to saturated zone Piping	1.00 1.00	Very limited Cutbanks cave Slow refill	1.00 0.43
Chabeneau-----	30	Very limited Seepage Slope	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 0.46	Very limited Cutbanks cave	1.00
Arcadian-----	25	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Thin layer Seepage	1.00 0.03	Very limited Depth to water	1.00
578D:							
Arcadian-----	59	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Thin layer Seepage	1.00 0.03	Very limited Depth to water	1.00
Keweenaw-----	40	Very limited Slope Seepage	1.00 0.99	Somewhat limited Seepage	0.15	Very limited Depth to water	1.00
625B:							
Fence-----	95	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Piping	1.00 1.00	Somewhat limited Cutbanks cave Slow refill	0.50 0.28
625C:							
Fence-----	98	Very limited Slope Seepage	1.00 0.72	Very limited Depth to saturated zone Piping	1.00 1.00	Somewhat limited Cutbanks cave Slow refill	0.50 0.28
626D:							
Sporley-----	85	Very limited Slope Seepage	1.00 0.04	Very limited Piping	1.00	Very limited Depth to water	1.00
626E:							
Sporley-----	90	Very limited Slope Seepage	1.00 0.04	Very limited Piping	1.00	Very limited Depth to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
648B: Annalake-----	93	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone	1.00	Very limited Cutbanks cave Slow refill	1.00 0.30
648C: Annalake-----	93	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone	1.00	Very limited Cutbanks cave Slow refill	1.00 0.30
650: Leafriver-----	90	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.48	Very limited Cutbanks cave	1.00
652B: Manido-----	52	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.48	Very limited Cutbanks cave Depth to saturated zone	1.00 0.01
Annalake-----	24	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone	1.00	Very limited Cutbanks cave Slow refill	1.00 0.30
656B: Stutts-----	60	Very limited Seepage	1.00	Somewhat limited Seepage	0.46	Very limited Depth to water	1.00
Zandi-----	30	Somewhat limited Seepage	0.70	Not limited		Very limited Depth to water	1.00
656C: Stutts-----	60	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.46	Very limited Depth to water	1.00
Zandi-----	30	Very limited Slope Seepage	1.00 0.70	Not limited		Very limited Depth to water	1.00
656D: Stutts-----	60	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.46	Very limited Depth to water	1.00
Zandi-----	30	Very limited Slope Seepage	1.00 0.70	Not limited		Very limited Depth to water	1.00
680B: Tonkey-----	37	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Piping Ponding Seepage	1.00 1.00 1.00 0.01	Somewhat limited Slow refill Cutbanks cave	0.28 0.10

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
680B: Pleine-----	32	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.04	Very limited Cutbanks cave	1.00
Annalake-----	20	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone	1.00	Very limited Cutbanks cave Slow refill	1.00 0.30
681: Cathro-----	45	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
Tonkey-----	37	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Piping Ponding Seepage	1.00 1.00 1.00 0.01	Somewhat limited Slow refill Cutbanks cave	0.28 0.10
683B: Amasa-----	45	Very limited Seepage	1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
Oldman-----	40	Very limited Seepage Depth to cemented pan	1.00 0.99	Very limited Depth to saturated zone Thin layer Large stones Seepage	1.00 0.99 0.96 0.09	Very limited Depth to water	1.00
683C: Amasa-----	45	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
Oldman-----	40	Very limited Seepage Slope Depth to cemented pan	1.00 1.00 0.99	Very limited Depth to saturated zone Thin layer Large stones Seepage	1.00 0.99 0.96 0.09	Very limited Depth to water	1.00
683D: Amasa-----	45	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
Oldman-----	40	Very limited Seepage Slope Depth to cemented pan	1.00 1.00 0.99	Very limited Depth to saturated zone Thin layer Large stones Seepage	1.00 0.99 0.96 0.09	Very limited Depth to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
684B: Amasa-----	70	Very limited Seepage Slope	1.00 0.08	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
684C: Amasa-----	78	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
684D: Amasa-----	78	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.64	Very limited Depth to water	1.00
686B: Annalake-----	40	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone	1.00	Very limited Cutbanks cave Slow refill	1.00 0.30
Robago-----	40	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone Piping Seepage	1.00 1.00 0.04	Very limited Cutbanks cave Slow refill	1.00 0.30
688: Cathro-----	60	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
Leafriver-----	40	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.48	Very limited Cutbanks cave	1.00
689B: Chabeneau-----	35	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.46	Very limited Cutbanks cave	1.00
Channing-----	30	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.82	Very limited Cutbanks cave	1.00
Gogebic-----	25	Somewhat limited Depth to cemented pan Seepage Slope	1.00 0.70 0.08	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.01	Very limited Depth to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
691B: Dishno-----	35	Very limited Seepage Depth to bedrock	1.00 0.37	Very limited Depth to saturated zone Thin layer Seepage Large stones	1.00 0.37 0.15 0.08	Very limited Cutbanks cave Depth to hard bedrock Large stones Depth to saturated zone	1.00 0.96 0.08 0.01
Tula-----	30	Somewhat limited Depth to cemented pan Seepage	0.91 0.73	Very limited Depth to saturated zone Thin layer Seepage	1.00 0.91 0.07	Very limited Cutbanks cave Depth to saturated zone Slow refill	1.00 0.96 0.27
Rock outcrop-----	20	Not rated		Not rated		Not rated	
691D: Dishno-----	35	Very limited Seepage Slope Depth to bedrock	1.00 1.00 0.37	Very limited Depth to saturated zone Thin layer Seepage Large stones	1.00 0.37 0.15 0.08	Very limited Cutbanks cave Depth to hard bedrock Large stones Depth to saturated zone	1.00 0.96 0.08 0.01
Tula-----	30	Somewhat limited Depth to cemented pan Seepage	0.91 0.73	Very limited Depth to saturated zone Thin layer Seepage	1.00 0.91 0.07	Very limited Cutbanks cave Depth to saturated zone Slow refill	1.00 0.96 0.27
Rock outcrop-----	20	Not rated		Not rated		Not rated	
693B: Chabeneau-----	50	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.46	Very limited Cutbanks cave	1.00
Annalake-----	40	Somewhat limited Seepage	0.70	Very limited Depth to saturated zone	1.00	Very limited Cutbanks cave Slow refill	1.00 0.30
694D: Annalake-----	40	Very limited Slope Seepage	1.00 0.70	Very limited Depth to saturated zone	1.00	Very limited Cutbanks cave Slow refill	1.00 0.30
Stutts-----	35	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.46	Very limited Depth to water	1.00
Arnheim-----	25	Somewhat limited Seepage	0.43	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Very limited Cutbanks cave Slow refill	1.00 0.05

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
5170: Minocqua-----	50	Very limited Seepage	1.00	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.50	Very limited Cutbanks cave	1.00
Pleine-----	30	Somewhat limited Seepage	0.72	Very limited Depth to saturated zone Ponding Seepage	1.00 1.00 0.04	Very limited Cutbanks cave	1.00
Cathro-----	15	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
5171B: Tula-----	60	Somewhat limited Depth to cemented pan Seepage	0.91 0.72	Very limited Depth to saturated zone Thin layer Seepage	1.00 0.91 0.05	Very limited Cutbanks cave Depth to saturated zone Slow refill	1.00 0.96 0.28
Wormet-----	15	Very limited Seepage	1.00	Very limited Depth to saturated zone Seepage	1.00 0.90	Very limited Cutbanks cave	1.00
Gogebic, sandy substratum-----	15	Very limited Seepage Depth to cemented pan Slope	1.00 1.00 0.08	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.24	Very limited Depth to water	1.00
5172B: Gogebic, sandy substratum-----	60	Very limited Seepage Depth to cemented pan Slope	1.00 1.00 0.08	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.24	Very limited Depth to water	1.00
Pence-----	15	Very limited Seepage	1.00	Somewhat limited Seepage	0.93	Very limited Depth to water	1.00
Cathro-----	15	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10

Soil Survey of Gogebic County, Michigan

Table 15a.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
5172C: Gogebic, sandy substratum-----	60	Very limited Seepage Slope Depth to cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.24	Very limited Depth to water	1.00
Pence-----	15	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.93	Very limited Depth to water	1.00
Cathro-----	15	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
5172D: Gogebic, sandy substratum-----	60	Very limited Seepage Slope Depth to cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.24	Very limited Depth to water	1.00
Pence-----	15	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.93	Very limited Depth to water	1.00
Cathro-----	15	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding	1.00 1.00 1.00	Somewhat limited Cutbanks cave	0.10
5173D: Gogebic, sandy substratum-----	60	Very limited Seepage Slope Depth to cemented pan	1.00 1.00 1.00	Very limited Depth to saturated zone Piping Thin layer Seepage	1.00 1.00 1.00 0.24	Very limited Depth to water	1.00
Pence-----	30	Very limited Seepage Slope	1.00 1.00	Somewhat limited Seepage	0.93	Very limited Depth to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
7: Histosols-----	60	Very limited Depth to saturated zone Restricted permeability	1.00 0.26	Very limited Ponding Depth to saturated zone Organic matter content Frost action Cutbanks cave	1.00 1.00 1.00 1.00 1.00
Aquents-----	40	Very limited Depth to saturated zone	1.00	Very limited Ponding Depth to saturated zone Frost action	1.00 1.00 1.00
10: Witbeck-----	90	Very limited Depth to saturated zone Water erosion	1.00 0.56	Very limited Depth to saturated zone Cutbanks cave Frost action Ponding	1.00 1.00 1.00 1.00
12A: Monico-----	100	Very limited Depth to saturated zone Water erosion Slope	1.00 0.89 0.04	Very limited Depth to saturated zone Frost action Cutbanks cave	1.00 1.00 1.00 1.00
13B: Argonne-----	83	Very limited Depth to saturated zone Water erosion Slope	1.00 0.17 0.16	Very limited Depth to saturated zone Cutbanks cave Frost action Depth to thin cemented pan	1.00 1.00 1.00 1.00 0.01
13C: Argonne-----	83	Very limited Depth to saturated zone Slope Water erosion	1.00 1.00 0.17	Very limited Depth to saturated zone Cutbanks cave Frost action Slope Depth to thin cemented pan	1.00 1.00 1.00 0.63 0.01

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
13D: Argonne-----	86	Very limited Slope Depth to saturated zone Water erosion	 1.00 1.00 0.17	Very limited Slope Depth to saturated zone Cutbanks cave Frost action Depth to thin cemented pan	 1.00 1.00 1.00 1.00 0.01
15B: Wabeno-----	100	Very limited Depth to cemented pan Water erosion Droughty Depth to saturated zone Slope	 1.00 1.00 0.99 0.68 0.16	Very limited Depth to thin cemented pan Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 0.50
15C: Wabeno-----	100	Very limited Depth to cemented pan Water erosion Slope Droughty Depth to saturated zone	 1.00 1.00 1.00 0.99 0.68	Very limited Depth to thin cemented pan Depth to saturated zone Cutbanks cave Slope Dense layer	 1.00 1.00 1.00 0.63 0.50
16A: Fence-----	100	Very limited Water erosion Depth to saturated zone Restricted permeability	 1.00 1.00 0.21	Very limited Depth to saturated zone Frost action Cutbanks cave	 1.00 1.00 1.00
17B: Lode-----	85	Very limited Water erosion Slope	 1.00 0.16	Very limited Cutbanks cave Deep to water	 1.00 1.00
17C: Lode-----	86	Very limited Water erosion Slope	 1.00 1.00	Very limited Cutbanks cave Deep to water Slope	 1.00 1.00 0.63
20B: Pence-----	62	Somewhat limited Water erosion Slope Droughty	 0.17 0.16 0.10	Very limited Cutbanks cave Deep to water	 1.00 1.00
Lode-----	30	Very limited Water erosion Slope	 1.00 0.16	Very limited Cutbanks cave Deep to water	 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
20C: Pence-----	86	Very limited Slope Water erosion Droughty	 1.00 0.17 0.10	Very limited Cutbanks cave Deep to water Slope	 1.00 1.00 0.63
21: Minocqua-----	60	Very limited Depth to saturated zone Water erosion	 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Frost action Ponding	 1.00 1.00 1.00 1.00
Leafriver-----	30	Very limited Depth to saturated zone Droughty	 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00
23B: Chabeneau-----	57	Very limited Water erosion Depth to saturated zone Slope	 1.00 1.00 0.04	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00
Karlin-----	28	Somewhat limited Slope	 0.16	Very limited Cutbanks cave Deep to water	 1.00 1.00
Pence-----	15	Somewhat limited Water erosion Slope Droughty	 0.17 0.16 0.10	Very limited Cutbanks cave Deep to water	 1.00 1.00
26B: Stambaugh-----	90	Very limited Water erosion Slope	 1.00 0.16	Very limited Cutbanks cave Frost action Deep to water	 1.00 1.00 1.00
27: Lupton-----	50	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone Organic matter content Frost action Ponding Cutbanks cave	 1.00 1.00 1.00 1.00 1.00
Tawas-----	48	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone Cutbanks cave Frost action Ponding Organic matter content	 1.00 1.00 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
28:					
Dawson-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave Frost action Too acid Ponding	1.00 1.00 1.00 1.00 1.00
Greenwood-----	35	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Organic matter content Frost action Ponding Cutbanks cave	1.00 1.00 1.00 1.00 1.00
Loxley-----	20	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Organic matter content Frost action Too acid Ponding	1.00 1.00 1.00 1.00 1.00
29B:					
Pence, very deep water table-----	85	Somewhat limited Water erosion Slope Droughty	0.17 0.16 0.09	Very limited Cutbanks cave Deep to water	1.00 1.00
31:					
Evart-----	55	Very limited Depth to saturated zone Water erosion Droughty	1.00 0.56 0.11	Very limited Flooding Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00
Tawas-----	45	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave Frost action Ponding Organic matter content	1.00 1.00 1.00 1.00 1.00
32A:					
Net-----	100	Very limited Depth to cemented pan Depth to saturated zone Water erosion Droughty	1.00 1.00 0.56 0.08	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Frost action Dense layer	1.00 1.00 1.00 1.00 0.50

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
35A: Beechwood-----	85	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	1.00	Frost action	1.00
		Slope	0.04	Cutbanks cave	1.00
36: Gay-----	58	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	0.56	Frost action	1.00
				Cutbanks cave	1.00
				Ponding	1.00
Pleine-----	30	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	0.17	Cutbanks cave	1.00
		Cobble content	0.08	Frost action	1.00
				Ponding	1.00
				Large stones	0.01
37B: Gogebic-----	51	Very limited		Very limited	
		Depth to cemented	1.00	Depth to thick	1.00
		pan		cemented pan	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	0.56	Cutbanks cave	1.00
		Slope	0.36	Dense layer	0.50
		Droughty	0.05		
Tula-----	31	Very limited		Very limited	
		Depth to cemented	1.00	Depth to thick	1.00
		pan		cemented pan	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Cobble content	0.05	Cutbanks cave	1.00
		Slope	0.04	Frost action	1.00
		Droughty	0.01	Dense layer	0.50
Lupton-----	15	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
				Organic matter	1.00
				content	
				Frost action	1.00
				Ponding	1.00
				Cutbanks cave	1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
38B: Gogebic, sandy substratum-----	95	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to thick cemented pan	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Water erosion	0.56	Cutbanks cave	1.00
		Slope	0.36	Dense layer	0.50
		Droughty	0.05		
38C: Gogebic, sandy substratum-----	95	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to thick cemented pan	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Cutbanks cave	1.00
		Water erosion	0.56	Slope	0.63
		Droughty	0.05	Dense layer	0.50
38D: Gogebic, sandy substratum-----	95	Very limited		Very limited	
		Slope	1.00	Depth to thick cemented pan	1.00
		Depth to cemented pan	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Water erosion	0.56	Cutbanks cave	1.00
		Droughty	0.05	Dense layer	0.50
39B: Gogebic, sandy substratum-----	85	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to thick cemented pan	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Water erosion	0.56	Cutbanks cave	1.00
		Slope	0.36	Dense layer	0.50
		Droughty	0.05		
39C: Gogebic, sandy substratum-----	85	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to thick cemented pan	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Cutbanks cave	1.00
		Water erosion	0.56	Slope	0.63
		Droughty	0.05	Dense layer	0.50

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
39D: Gogebic, sandy substratum-----	85	Very limited Slope Depth to cemented pan Depth to saturated zone Water erosion Droughty	 1.00 1.00 1.00 0.56 0.05	Very limited Depth to thick cemented pan Slope Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 1.00 0.50
41: Lupton-----	60	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Organic matter content Frost action Ponding Cutbanks cave	1.00 1.00 1.00 1.00 1.00
Pleine-----	23	Very limited Depth to saturated zone Water erosion	1.00 0.17	Very limited Depth to saturated zone Cutbanks cave Frost action Ponding	1.00 1.00 1.00 1.00
Cathro-----	15	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Frost action Cutbanks cave Ponding Organic matter content	1.00 1.00 1.00 1.00 1.00
42: Ausable-----	70	Very limited Depth to saturated zone	1.00	Very limited Flooding Depth to saturated zone Cutbanks cave	1.00 1.00 1.00
Tawas-----	25	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave Frost action Ponding Organic matter content	1.00 1.00 1.00 1.00 1.00
43B: Karlin-----	55	Somewhat limited Slope	0.36	Very limited Cutbanks cave Deep to water	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
43B: Pence-----	40	Somewhat limited Slope Water erosion Droughty	 0.36 0.17 0.10	Very limited Cutbanks cave Deep to water	 1.00 1.00
43C: Karlin-----	55	Very limited Slope	1.00	Very limited Cutbanks cave Deep to water Slope	1.00 1.00 0.63
Pence-----	40	Very limited Slope Water erosion Droughty	1.00 0.17 0.10	Very limited Cutbanks cave Deep to water Slope	1.00 1.00 0.63
43D: Karlin-----	55	Very limited Slope	1.00	Very limited Slope Cutbanks cave Deep to water	1.00 1.00 1.00
Pence-----	40	Very limited Slope Water erosion Droughty	1.00 0.17 0.10	Very limited Slope Cutbanks cave Deep to water	1.00 1.00 1.00
44B: Karlin-----	36	Somewhat limited Slope	0.62	Very limited Cutbanks cave Deep to water	1.00 1.00
Keweenaw-----	30	Somewhat limited Droughty Slope	0.81 0.16	Very limited Cutbanks cave Deep to water	1.00 1.00
Sarona, dense substratum-----	25	Somewhat limited Slope Water erosion	0.62 0.01	Very limited Cutbanks cave Deep to water	1.00 1.00
44C: Karlin-----	36	Very limited Slope	1.00	Very limited Cutbanks cave Deep to water Slope	1.00 1.00 1.00
Keweenaw-----	30	Very limited Slope Droughty	1.00 0.81	Very limited Cutbanks cave Deep to water Slope	1.00 1.00 1.00
Sarona, dense substratum-----	25	Very limited Slope Water erosion	1.00 0.01	Very limited Cutbanks cave Deep to water Slope	1.00 1.00 0.16

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
44D:					
Karlin-----	36	Very limited Slope	1.00	Very limited Slope	1.00
				Cutbanks cave	1.00
				Deep to water	1.00
Keweenaw-----	30	Very limited Slope	1.00	Very limited Slope	1.00
		Droughty	0.81	Cutbanks cave	1.00
				Deep to water	1.00
Sarona, dense substratum-----	25	Very limited Slope	1.00	Very limited Slope	1.00
		Water erosion	0.01	Cutbanks cave	1.00
				Deep to water	1.00
46C:					
Amasa-----	54	Very limited Water erosion	1.00	Very limited Cutbanks cave	1.00
		Slope	1.00	Deep to water	1.00
				Slope	0.16
Karlin-----	40	Very limited Slope	1.00	Very limited Cutbanks cave	1.00
				Deep to water	1.00
				Slope	0.16
46D:					
Amasa-----	52	Very limited Slope	1.00	Very limited Slope	1.00
		Water erosion	1.00	Cutbanks cave	1.00
				Deep to water	1.00
Karlin-----	38	Very limited Slope	1.00	Very limited Slope	1.00
				Cutbanks cave	1.00
				Deep to water	1.00
46E:					
Amasa-----	52	Very limited Slope	1.00	Very limited Slope	1.00
		Water erosion	1.00	Cutbanks cave	1.00
				Deep to water	1.00
Karlin-----	38	Very limited Slope	1.00	Very limited Slope	1.00
				Cutbanks cave	1.00
				Deep to water	1.00
46F:					
Amasa-----	53	Very limited Slope	1.00	Very limited Slope	1.00
		Water erosion	1.00	Cutbanks cave	1.00
				Deep to water	1.00
Karlin-----	37	Very limited Slope	1.00	Very limited Slope	1.00
				Cutbanks cave	1.00
				Deep to water	1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
47B: Karlin, very deep water table-----	41	Somewhat limited Slope	0.16	Very limited Cutbanks cave Deep to water	1.00 1.00
Noseum-----	35	Somewhat limited Depth to saturated zone Water erosion Slope	0.86 0.17 0.04	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
Gay-----	16	Very limited Depth to saturated zone Water erosion	1.00 0.56	Very limited Depth to saturated zone Frost action Cutbanks cave Ponding	1.00 1.00 1.00 1.00
48C: Karlin-----	75	Very limited Slope	1.00	Very limited Cutbanks cave Deep to water Slope	1.00 1.00 1.00
Michigamme-----	20	Very limited Depth to bedrock Restricted permeability Slope Water erosion	1.00 1.00 1.00 0.56	Very limited Depth to bedrock Deep to water Cutbanks cave Slope	1.00 1.00 1.00 0.16
48F: Karlin-----	55	Very limited Slope	1.00	Very limited Slope Cutbanks cave Deep to water	1.00 1.00 1.00
Michigamme-----	30	Very limited Slope Restricted permeability Depth to bedrock Water erosion	1.00 1.00 1.00 0.56	Very limited Depth to bedrock Slope Deep to water Cutbanks cave	1.00 1.00 1.00 1.00
49B: Pelissier-----	52	Somewhat limited Droughty Slope	0.71 0.16	Very limited Cutbanks cave Deep to water	1.00 1.00
Sarwet-----	35	Very limited Depth to saturated zone Water erosion Slope	1.00 0.56 0.16	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
49C: Pelissier-----	50	Very limited Slope Droughty	 1.00 0.71	Very limited Cutbanks cave Deep to water Slope	 1.00 1.00 1.00
Sarwet-----	35	Very limited Slope Depth to saturated zone Water erosion	 1.00 1.00 0.56	Very limited Depth to saturated zone Cutbanks cave Slope	 1.00 1.00 1.00
49D: Pelissier-----	85	Very limited Slope Droughty	 1.00 0.71	Very limited Slope Cutbanks cave Deep to water	 1.00 1.00 1.00
52B: Pence-----	56	Somewhat limited Slope Water erosion Droughty	 0.36 0.17 0.10	Very limited Cutbanks cave Deep to water	 1.00 1.00
Vilas-----	35	Somewhat limited Slope Droughty	 0.16 0.08	Very limited Cutbanks cave Deep to water	 1.00 1.00
52C: Pence-----	56	Very limited Slope Water erosion Droughty	 1.00 0.17 0.10	Very limited Cutbanks cave Deep to water Slope	 1.00 1.00 0.63
Vilas-----	35	Very limited Slope Droughty	 1.00 0.08	Very limited Cutbanks cave Deep to water Slope	 1.00 1.00 0.63
53B: Manitowish-----	77	Somewhat limited Depth to saturated zone Slope	 0.86 0.04	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00
Croswell-----	22	Somewhat limited Depth to saturated zone Droughty Slope	 0.86 0.68 0.16	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00
57B: Karlin-----	70	Somewhat limited Slope	 0.36	Very limited Cutbanks cave Deep to water	 1.00 1.00
Manitowish-----	20	Somewhat limited Depth to saturated zone Slope	 0.86 0.36	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
57C: Karlin-----	75	Very limited Slope	1.00	Very limited Cutbanks cave Deep to water Slope	1.00 1.00 0.63
Manitowish-----	16	Very limited Slope Depth to saturated zone	1.00 0.86	Very limited Depth to saturated zone Cutbanks cave Slope	1.00 1.00 1.00 0.63
58B: Vilas, very deep water table-----	40	Somewhat limited Slope Droughty	0.16 0.08	Very limited Cutbanks cave Deep to water	1.00 1.00
Croswell-----	22	Somewhat limited Depth to saturated zone Droughty Slope	0.86 0.68 0.16	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
Pence, very deep water table-----	20	Somewhat limited Water erosion Slope Droughty	0.17 0.16 0.10	Very limited Cutbanks cave Deep to water	1.00 1.00
61: Tawas-----	60	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave Frost action Ponding Organic matter content	1.00 1.00 1.00 1.00 1.00
Kinross-----	30	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00
62B: Pelkie-----	100	Somewhat limited Droughty Depth to saturated zone Water erosion Slope	0.69 0.47 0.17 0.16	Very limited Cutbanks cave Depth to saturated zone Flooding	1.00 1.00 0.60

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
83: Bowstring-----	90	Very limited		Very limited	
		Depth to	1.00	Flooding	1.00
		saturated zone		Depth to	1.00
		Water erosion	1.00	saturated zone	
		Restricted	0.15	Cutbanks cave	1.00
		permeability		Frost action	1.00
				Ponding	1.00
141D: Oldman-----	80	Very limited		Very limited	
		Depth to cemented	1.00	Depth to thick	1.00
		pan		cemented pan	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Slope	1.00	Cutbanks cave	1.00
		Cobble content	1.00	Large stones	0.96
		Droughty	0.74	Slope	0.63
141E: Oldman-----	80	Very limited		Very limited	
		Slope	1.00	Depth to thick	1.00
		Depth to cemented	1.00	cemented pan	
		pan		Slope	1.00
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Cobble content	1.00	Cutbanks cave	1.00
		Droughty	0.74	Large stones	0.96
141F: Porkies-----	80	Very limited		Very limited	
		Slope	1.00	Slope	1.00
				Cutbanks cave	1.00
				Deep to water	1.00
				Dense layer	0.50
				Large stones	0.13
214B: Amnicon-----	60	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	1.00	Too clayey	1.00
		Restricted	1.00	Cutbanks cave	1.00
		permeability			
		Slope	0.62		
Bergland-----	30	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Restricted	1.00	Frost action	1.00
		permeability		Too clayey	1.00
		Water erosion	0.56	Cutbanks cave	1.00
				Ponding	1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
216B: Amnicon-----	85	Very limited Depth to saturated zone Water erosion Restricted permeability Slope	 1.00 1.00 1.00 0.62	Very limited Depth to saturated zone Too clayey Cutbanks cave	 1.00 1.00 1.00
217A: Cuttre-----	85	Very limited Depth to saturated zone Water erosion Restricted permeability	 1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Frost action Cutbanks cave	 1.00 1.00 1.00 1.00
218: Bergland-----	80	Very limited Depth to saturated zone Restricted permeability Water erosion	 1.00 1.00 0.56	Very limited Depth to saturated zone Frost action Too clayey Cutbanks cave Ponding	 1.00 1.00 1.00 1.00 1.00
219B: Payseor-----	50	Very limited Depth to saturated zone Restricted permeability Water erosion	 1.00 1.00 0.56	Very limited Depth to saturated zone Cutbanks cave Too clayey Frost action	 1.00 1.00 1.00 1.00
Froberg-----	40	Very limited Restricted permeability Depth to saturated zone Water erosion Slope	 1.00 1.00 0.89 0.16	Very limited Depth to saturated zone Too clayey Cutbanks cave	 1.00 1.00 1.00
222: Matchwood-----	85	Very limited Depth to saturated zone Water erosion Restricted permeability	 1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Frost action Cutbanks cave Ponding	 1.00 1.00 1.00 1.00 1.00
225A: Cuttre-----	50	Very limited Depth to saturated zone Water erosion Restricted permeability	 1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Frost action Cutbanks cave	 1.00 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
225A: Bergland-----	40	Very limited Depth to saturated zone Restricted permeability Water erosion	 1.00 1.00 0.56	Very limited Depth to saturated zone Frost action Too clayey Cutbanks cave Ponding	 1.00 1.00 1.00 1.00 1.00
226B: Froberg-----	85	Very limited Restricted permeability Depth to saturated zone Water erosion Slope	 1.00 1.00 0.89 0.16	Very limited Depth to saturated zone Too clayey Cutbanks cave	 1.00 1.00 1.00
230B: Moquah-----	55	Somewhat limited Water erosion Slope	 0.56 0.04	Very limited Cutbanks cave Deep to water Depth to saturated zone	 1.00 1.00 0.82
Arnheim-----	30	Very limited Depth to saturated zone Water erosion	 1.00 1.00	Very limited Flooding Depth to saturated zone Cutbanks cave Frost action Ponding	 1.00 1.00 1.00 1.00 1.00
231: Matchwood-----	45	Very limited Depth to saturated zone Water erosion Restricted permeability	 1.00 1.00 1.00	Very limited Depth to saturated zone Too clayey Frost action Cutbanks cave Ponding	 1.00 1.00 1.00 1.00 1.00
Dorval-----	35	Very limited Depth to saturated zone Restricted permeability	 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Organic matter content	 1.00 1.00 1.00 1.00
233: Schaat Creek-----	90	Very limited Depth to saturated zone Water erosion Restricted permeability	 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Frost action Cutbanks cave	 1.00 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
239D: Miskoaki-----	85	Very limited Slope Water erosion Restricted permeability	 1.00 1.00 1.00	Very limited Slope Too clayey Deep to water Cutbanks cave	 1.00 1.00 1.00 1.00
277B: Kellogg, sandy substratum-----	50	Very limited Depth to saturated zone Restricted permeability Slope	 1.00 0.96 0.16	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00
Allendale-----	35	Very limited Depth to saturated zone Restricted permeability Water erosion Slope	 1.00 1.00 0.17 0.16	Very limited Depth to saturated zone Cutbanks cave Too clayey	 1.00 1.00 0.12
280B: Flintsteel-----	85	Very limited Depth to saturated zone Water erosion Restricted permeability Slope	 1.00 1.00 0.60 0.04	Very limited Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 0.50
280C: Flintsteel-----	85	Very limited Depth to saturated zone Water erosion Slope Restricted permeability	 1.00 1.00 1.00 0.60	Very limited Depth to saturated zone Cutbanks cave Dense layer Slope	 1.00 1.00 0.50 0.16
282B: Big Iron-----	70	Very limited Depth to saturated zone Water erosion Restricted permeability Slope	 1.00 1.00 0.26 0.04	Very limited Depth to saturated zone Frost action Cutbanks cave Dense layer	 1.00 1.00 1.00 0.50
Flintsteel-----	20	Very limited Depth to saturated zone Water erosion Restricted permeability Slope	 1.00 1.00 0.60 0.04	Very limited Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 0.50

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
283B:					
Loggerhead-----	40	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	0.56	Cutbanks cave	1.00
		Restricted	0.15		
		permeability			
		Slope	0.04		
Noseum-----	30	Somewhat limited		Very limited	
		Depth to	0.86	Depth to	1.00
		saturated zone		saturated zone	
		Slope	0.36	Cutbanks cave	1.00
		Water erosion	0.17		
Ubly-----	20	Very limited		Very limited	
		Water erosion	1.00	Deep to water	1.00
		Slope	0.83	Cutbanks cave	1.00
		Restricted	0.60	Dense layer	0.50
		permeability			
283C:					
Loggerhead-----	40	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Slope	1.00	Cutbanks cave	1.00
		Water erosion	0.56	Slope	0.16
		Restricted	0.15		
		permeability			
Noseum-----	30	Very limited		Very limited	
		Slope	1.00	Depth to	1.00
		Depth to	0.86	saturated zone	
		saturated zone		Cutbanks cave	1.00
		Water erosion	0.17		
Ubly-----	20	Very limited		Very limited	
		Water erosion	1.00	Deep to water	1.00
		Slope	1.00	Cutbanks cave	1.00
		Restricted	0.60	Dense layer	0.50
		permeability			
284:					
Aquents-----	55	Very limited		Very limited	
		Depth to	1.00	Ponding	1.00
		saturated zone		Depth to	1.00
				saturated zone	
				Frost action	1.00
Gull Point-----	40	Very limited		Very limited	
		Depth to	1.00	Flooding	1.00
		saturated zone		Depth to	1.00
		Restricted	0.96	saturated zone	
		permeability		Frost action	1.00
		Water erosion	0.17	Cutbanks cave	1.00
				Dense layer	0.50

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
285F: Rockland-----	70	Very limited Slope Water erosion Restricted permeability	 1.00 0.56 0.26	Very limited Slope Deep to water Cutbanks cave	 1.00 1.00 1.00
Arnheim-----	15	Very limited Depth to saturated zone Water erosion	 1.00 1.00	Very limited Flooding Depth to saturated zone Cutbanks cave Frost action Ponding	 1.00 1.00 1.00 1.00 1.00
286A: Big Iron-----	65	Very limited Depth to saturated zone Water erosion Restricted permeability	 1.00 1.00 0.26	Very limited Depth to saturated zone Frost action Cutbanks cave Dense layer	 1.00 1.00 1.00 1.00 0.50
Belding-----	20	Very limited Depth to saturated zone Water erosion Restricted permeability	 1.00 1.00 0.21	Very limited Depth to saturated zone Cutbanks cave Frost action	 1.00 1.00 1.00
287: Trap Falls-----	55	Very limited Depth to saturated zone Water erosion Restricted permeability	 1.00 1.00 1.00	Very limited Depth to saturated zone Frost action Cutbanks cave Ponding Dense layer	 1.00 1.00 1.00 1.00 1.00 0.50
Tonkey-----	35	Very limited Depth to saturated zone Water erosion	 1.00 0.89	Very limited Depth to saturated zone Cutbanks cave Frost action Ponding	 1.00 1.00 1.00 1.00
289B: Amasa-----	95	Very limited Water erosion Slope	 1.00 0.16	Very limited Cutbanks cave Deep to water	 1.00 1.00
290B: Flintsteel-----	80	Very limited Depth to saturated zone Water erosion Restricted permeability Slope	 1.00 1.00 0.60 0.04	Very limited Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 0.50

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
290C: Flintsteel-----	85	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	1.00	Cutbanks cave	1.00
		Slope	1.00	Slope	0.63
		Restricted	0.60	Dense layer	0.50
		permeability			
291B: Kalkaska-----	80	Somewhat limited		Very limited	
		Droughty	0.28	Cutbanks cave	1.00
		Slope	0.16	Deep to water	1.00
291D: Kalkaska-----	85	Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00
		Droughty	0.28	Deep to water	1.00
				Slope	0.63
292B: Manido-----	45	Somewhat limited		Very limited	
		Depth to	0.86	Depth to	1.00
		saturated zone		saturated zone	
				Cutbanks cave	1.00
Richter-----	40	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	0.17	Cutbanks cave	1.00
		Slope	0.16	Frost action	1.00
293A: Wainola-----	55	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Slope	0.04	Cutbanks cave	1.00
		Droughty	0.02		
Trap Falls-----	25	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	1.00	Frost action	1.00
		Restricted	1.00	Cutbanks cave	1.00
		permeability		Ponding	1.00
				Dense layer	0.50
296B: Manido-----	35	Somewhat limited		Very limited	
		Depth to	0.86	Depth to	1.00
		saturated zone		saturated zone	
		Slope	0.16	Cutbanks cave	1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
296B: Fence-----	30	Very limited Water erosion Depth to saturated zone Restricted permeability Slope	 1.00 1.00 0.21 0.16	Very limited Depth to saturated zone Frost action Cutbanks cave	 1.00 1.00 1.00 1.00
Gogebic, sandy substratum-----	20	Very limited Depth to cemented pan Depth to saturated zone Water erosion Slope Droughty	 1.00 1.00 0.56 0.16 0.05	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 1.00 0.50
296D: Manido-----	35	Very limited Slope Depth to saturated zone	 1.00 0.86	Very limited Slope Depth to saturated zone Cutbanks cave	 1.00 1.00 1.00
Sporley-----	30	Very limited Slope Water erosion Restricted permeability	 1.00 1.00 0.22	Very limited Slope Frost action Deep to water Cutbanks cave	 1.00 1.00 1.00 1.00
Gogebic, sandy substratum-----	20	Very limited Slope Depth to cemented pan Depth to saturated zone Water erosion Droughty	 1.00 1.00 1.00 0.56 0.05	Very limited Depth to thick cemented pan Slope Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 1.00 1.00 0.50
299B: Zandi-----	40	Somewhat limited Slope Water erosion	 0.36 0.17	Very limited Cutbanks cave Deep to water	 1.00 1.00
Amasa-----	30	Very limited Water erosion Slope	 1.00 0.16	Very limited Cutbanks cave Deep to water	 1.00 1.00
Flintsteel-----	20	Very limited Water erosion Depth to saturated zone Restricted permeability Slope	 1.00 1.00 0.60 0.04	Very limited Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 0.50

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
299C:					
Zandi-----	40	Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00
		Water erosion	0.17	Deep to water	1.00
				Slope	0.63
Amasa-----	30	Very limited		Very limited	
		Water erosion	1.00	Cutbanks cave	1.00
		Slope	1.00	Deep to water	1.00
				Slope	0.63
Flintsteel-----	20	Very limited		Very limited	
		Water erosion	1.00	Depth to	1.00
		Slope	1.00	saturated zone	
		Depth to	1.00	Cutbanks cave	1.00
		saturated zone		Slope	0.63
		Restricted	0.60	Dense layer	0.50
		permeability			
301A:					
Moodig-----	86	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	0.89	Cutbanks cave	1.00
302B:					
Manitowish-----	85	Somewhat limited		Very limited	
		Depth to	0.86	Depth to	1.00
		saturated zone		saturated zone	
		Slope	0.16	Cutbanks cave	1.00
302C:					
Manitowish-----	85	Very limited		Very limited	
		Slope	1.00	Depth to	1.00
		Depth to	0.86	saturated zone	
		saturated zone		Cutbanks cave	1.00
				Slope	0.63
303:					
Bowstring-----	50	Very limited		Very limited	
		Depth to	1.00	Flooding	1.00
		saturated zone		Depth to	1.00
		Water erosion	1.00	saturated zone	
				Cutbanks cave	1.00
				Frost action	1.00
				Ponding	1.00
Arnheim-----	40	Very limited		Very limited	
		Depth to	1.00	Flooding	1.00
		saturated zone		Depth to	1.00
		Water erosion	1.00	saturated zone	
				Cutbanks cave	1.00
				Frost action	1.00
				Ponding	1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
305B:					
Keweenaw-----	45	Somewhat limited		Very limited	
		Droughty	0.81	Cutbanks cave	1.00
		Slope	0.16	Deep to water	1.00
Siskiwit-----	40	Somewhat limited		Very limited	
		Depth to	0.86	Depth to	1.00
		saturated zone		saturated zone	
		Slope	0.62	Cutbanks cave	1.00
305C:					
Keweenaw-----	45	Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00
		Droughty	0.81	Deep to water	1.00
				Slope	0.16
Siskiwit-----	40	Somewhat limited		Very limited	
		Depth to	0.86	Depth to	1.00
		saturated zone		saturated zone	
		Slope	0.83	Cutbanks cave	1.00
307:					
Lupton-----	45	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
				Organic matter	1.00
				content	
				Frost action	1.00
				Ponding	1.00
				Cutbanks cave	1.00
Cathro-----	45	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
				Frost action	1.00
				Cutbanks cave	1.00
				Ponding	1.00
				Organic matter	1.00
				content	
309:					
Cathro-----	85	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
				Frost action	1.00
				Cutbanks cave	1.00
				Ponding	1.00
				Organic matter	1.00
				content	
310B:					
Gogebic-----	92	Very limited		Very limited	
		Depth to cemented	1.00	Depth to thick	1.00
		pan		cemented pan	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	0.56	Cutbanks cave	1.00
		Slope	0.36	Dense layer	0.50
		Droughty	0.05		

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
310C: Gogebic-----	92	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to thick cemented pan	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Cutbanks cave	1.00
		Water erosion	0.56	Slope	0.63
		Droughty	0.05	Dense layer	0.50
310D: Gogebic-----	92	Very limited		Very limited	
		Slope	1.00	Depth to thick cemented pan	1.00
		Depth to cemented pan	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Water erosion	0.56	Cutbanks cave	1.00
		Droughty	0.05	Dense layer	0.50
310E: Schweitzer-----	90	Very limited		Very limited	
		Slope	1.00	Depth to thick cemented pan	1.00
		Depth to cemented pan	1.00	Slope	1.00
		Cobble content	0.86	Cutbanks cave	1.00
		Water erosion	0.17	Deep to water	1.00
		Droughty	0.01	Dense layer	0.50
311B: Tula-----	45	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to thick cemented pan	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Cobble content	0.05	Cutbanks cave	1.00
		Droughty	0.01	Frost action	1.00
				Dense layer	0.50
Gogebic-----	40	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to thick cemented pan	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Water erosion	0.56	Cutbanks cave	1.00
		Slope	0.36	Dense layer	0.50
		Droughty	0.05		
312A: Tula-----	35	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to thick cemented pan	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Cobble content	0.05	Cutbanks cave	1.00
		Slope	0.04	Frost action	1.00
		Droughty	0.01	Dense layer	0.50

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
312A: Foxpaw-----	30	Very limited Depth to saturated zone Water erosion	1.00 0.17	Very limited Depth to saturated zone Cutbanks cave Frost action Ponding	1.00 1.00 1.00 1.00
Gay-----	25	Very limited Depth to saturated zone Water erosion	1.00 0.56	Very limited Depth to saturated zone Frost action Cutbanks cave Ponding	1.00 1.00 1.00 1.00
316: Gay-----	85	Very limited Depth to saturated zone Water erosion	1.00 0.56	Very limited Depth to saturated zone Frost action Cutbanks cave Ponding	1.00 1.00 1.00 1.00
317B: Gogebic-----	95	Very limited Depth to cemented pan Depth to saturated zone Water erosion Slope Droughty	1.00 1.00 0.56 0.36 0.05	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	1.00 1.00 1.00 1.00 0.50
317C: Gogebic-----	90	Very limited Depth to cemented pan Depth to saturated zone Slope Water erosion Droughty	1.00 1.00 1.00 0.56 0.05	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Slope Dense layer	1.00 1.00 1.00 0.63 0.50
317D: Gogebic-----	88	Very limited Slope Depth to cemented pan Depth to saturated zone Water erosion Droughty	1.00 1.00 1.00 0.56 0.05	Very limited Depth to thick cemented pan Slope Depth to saturated zone Cutbanks cave Dense layer	1.00 1.00 1.00 1.00 0.50
319B: McMillan-----	45	Somewhat limited Water erosion Droughty Slope	0.17 0.16 0.16	Very limited Cutbanks cave Deep to water	1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
319B: Noseum-----	40	Somewhat limited Depth to saturated zone Water erosion Slope	0.86 0.17 0.04	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
319C: McMillan-----	45	Very limited Slope Water erosion Droughty	1.00 0.17 0.16	Very limited Cutbanks cave Deep to water Slope	1.00 1.00 0.63
Islandlake-----	40	Very limited Slope Droughty	1.00 0.13	Very limited Cutbanks cave Deep to water Slope	1.00 1.00 0.63
319D: McMillan-----	45	Very limited Slope Water erosion Droughty	1.00 0.17 0.16	Very limited Slope Cutbanks cave Deep to water	1.00 1.00 1.00
Islandlake-----	40	Very limited Slope Droughty	1.00 0.13	Very limited Slope Cutbanks cave Deep to water	1.00 1.00 1.00
319E: McMillan-----	45	Very limited Slope Water erosion Droughty	1.00 0.17 0.16	Very limited Slope Cutbanks cave Deep to water	1.00 1.00 1.00
Islandlake-----	40	Very limited Slope Droughty	1.00 0.13	Very limited Slope Cutbanks cave Deep to water	1.00 1.00 1.00
322B: Stutts-----	60	Somewhat limited Droughty Slope	0.24 0.16	Very limited Cutbanks cave Deep to water	1.00 1.00
Keweenaw-----	30	Somewhat limited Droughty Slope	0.81 0.16	Very limited Cutbanks cave Deep to water	1.00 1.00
322C: Stutts-----	60	Very limited Slope Droughty	1.00 0.24	Very limited Cutbanks cave Deep to water Slope	1.00 1.00 0.63
Keweenaw-----	30	Very limited Slope Droughty	1.00 0.81	Very limited Cutbanks cave Deep to water Slope	1.00 1.00 0.63

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
322D:					
Stutts-----	60	Very limited Slope	1.00	Very limited Slope	1.00
		Droughty	0.24	Cutbanks cave	1.00
				Deep to water	1.00
Keweenaw-----	30	Very limited Slope	1.00	Very limited Slope	1.00
		Droughty	0.81	Cutbanks cave	1.00
				Deep to water	1.00
323B:					
Keweenaw-----	50	Somewhat limited Droughty	0.81	Very limited Cutbanks cave	1.00
		Slope	0.16	Deep to water	1.00
Kalkaska-----	40	Somewhat limited Droughty	0.28	Very limited Cutbanks cave	1.00
		Slope	0.16	Deep to water	1.00
323C:					
Keweenaw-----	50	Very limited Slope	1.00	Very limited Cutbanks cave	1.00
		Droughty	0.81	Deep to water	1.00
				Slope	0.63
Kalkaska-----	40	Very limited Slope	1.00	Very limited Cutbanks cave	1.00
		Droughty	0.28	Deep to water	1.00
				Slope	0.63
323D:					
Keweenaw-----	50	Very limited Slope	1.00	Very limited Slope	1.00
		Droughty	0.81	Cutbanks cave	1.00
				Deep to water	1.00
Kalkaska-----	40	Very limited Slope	1.00	Very limited Slope	1.00
		Droughty	0.28	Cutbanks cave	1.00
				Deep to water	1.00
325B:					
Siskiwit-----	55	Somewhat limited Depth to	0.86	Very limited Depth to	1.00
		saturated zone		saturated zone	
		Slope	0.62	Cutbanks cave	1.00
Gogebic-----	45	Very limited Depth to cemented	1.00	Very limited Depth to thick	1.00
		pan		cemented pan	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	0.56	Cutbanks cave	1.00
		Slope	0.16	Dense layer	0.50
		Droughty	0.05		

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
325C: Siskiwit-----	55	Somewhat limited Depth to saturated zone Slope	0.86 0.83	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
Gogebic-----	45	Very limited Depth to cemented pan Depth to saturated zone Slope Water erosion Droughty	1.00 1.00 1.00 0.56 0.05	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer Slope	1.00 1.00 1.00 0.50 0.04
327: Foxpaw-----	60	Very limited Depth to saturated zone Water erosion	1.00 0.17	Very limited Depth to saturated zone Cutbanks cave Frost action Ponding	1.00 1.00 1.00 1.00
Sarwet-----	40	Very limited Depth to saturated zone Water erosion	1.00 0.56	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
328B: Annalake-----	50	Very limited Depth to saturated zone Water erosion Slope	1.00 0.17 0.16	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00
Karlin-----	36	Somewhat limited Slope	0.36	Very limited Cutbanks cave Deep to water	1.00 1.00
328C: Annalake-----	50	Very limited Slope Depth to saturated zone Water erosion	1.00 1.00 0.17	Very limited Depth to saturated zone Cutbanks cave Slope	1.00 1.00 0.63
Karlin-----	40	Very limited Slope	1.00	Very limited Cutbanks cave Deep to water Slope	1.00 1.00 0.63
328D: Karlin-----	50	Very limited Slope	1.00	Very limited Slope Cutbanks cave Deep to water	1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
328D: Zandi-----	45	Very limited Slope Water erosion	 1.00 0.17	Very limited Slope Cutbanks cave Deep to water	 1.00 1.00 1.00
329A: Tula-----	90	Very limited Depth to cemented pan Depth to saturated zone Water erosion Slope Droughty	 1.00 1.00 0.56 0.04 0.01	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Frost action Dense layer	 1.00 1.00 1.00 1.00 0.50
351B: Gogebic-----	85	Very limited Depth to cemented pan Depth to saturated zone Water erosion Slope Droughty	 1.00 1.00 0.56 0.36 0.05	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 0.50
351C: Gogebic-----	85	Very limited Depth to cemented pan Depth to saturated zone Slope Water erosion Droughty	 1.00 1.00 1.00 0.56 0.05	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Slope Dense layer	 1.00 1.00 1.00 0.63 0.50
351D: Gogebic-----	85	Very limited Slope Depth to cemented pan Depth to saturated zone Water erosion Droughty	 1.00 1.00 1.00 0.56 0.05	Very limited Depth to thick cemented pan Slope Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 1.00 0.50
351E: Schweitzer-----	85	Very limited Slope Depth to cemented pan Cobble content Water erosion Droughty	 1.00 1.00 0.83 0.56 0.02	Very limited Depth to thick cemented pan Slope Cutbanks cave Deep to water Dense layer	 1.00 1.00 1.00 1.00 0.50

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
351F: Schweitzer-----	90	Very limited Slope Depth to cemented pan Cobble content Water erosion Droughty	 1.00 1.00 0.83 0.56 0.02	Very limited Depth to thick cemented pan Slope Cutbanks cave Deep to water Dense layer	 1.00 1.00 1.00 1.00 0.50
353A: Tula-----	85	Very limited Depth to cemented pan Depth to saturated zone Slope Droughty Cobble content	 1.00 1.00 0.04 0.01 0.01	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Frost action Dense layer	 1.00 1.00 1.00 1.00 0.50
354B: Gogebic-----	90	Very limited Depth to cemented pan Depth to saturated zone Water erosion Slope Droughty	 1.00 1.00 0.56 0.36 0.05	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 0.50
354C: Gogebic-----	90	Very limited Depth to cemented pan Depth to saturated zone Slope Water erosion Droughty	 1.00 1.00 1.00 0.56 0.05	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Slope Dense layer	 1.00 1.00 1.00 0.63 0.50
354D: Gogebic-----	85	Very limited Slope Depth to cemented pan Depth to saturated zone Water erosion Droughty	 1.00 1.00 1.00 0.56 0.05	Very limited Depth to thick cemented pan Slope Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 1.00 0.50
354E: Schweitzer-----	85	Very limited Slope Depth to cemented pan Cobble content Water erosion Droughty	 1.00 1.00 0.86 0.17 0.01	Very limited Depth to thick cemented pan Slope Cutbanks cave Deep to water Dense layer	 1.00 1.00 1.00 1.00 0.50

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
354F: Schweitzer-----	90	Very limited Slope Depth to cemented pan Cobble content Water erosion Droughty	 1.00 1.00 0.86 0.17 0.01	Very limited Depth to thick cemented pan Slope Cutbanks cave Deep to water Dense layer	 1.00 1.00 1.00 1.00 0.50
363C: Talus-----	50	Not rated		Not rated	
Arcadian-----	35	Very limited Depth to bedrock Droughty Slope	 1.00 1.00 1.00	Very limited Depth to bedrock Deep to water Cutbanks cave Slope	 1.00 1.00 1.00 0.63
363D: Talus-----	46	Not rated		Not rated	
Arcadian-----	35	Very limited Slope Depth to bedrock Droughty	 1.00 1.00 1.00	Very limited Depth to bedrock Slope Deep to water Cutbanks cave	 1.00 1.00 1.00 1.00
363E: Talus-----	50	Not rated		Not rated	
Arcadian-----	35	Very limited Slope Depth to bedrock Droughty	 1.00 1.00 1.00	Very limited Depth to bedrock Slope Deep to water Cutbanks cave	 1.00 1.00 1.00 1.00
363F: Talus-----	50	Not rated		Not rated	
Arcadian-----	35	Very limited Slope Depth to bedrock Droughty	 1.00 1.00 1.00	Very limited Depth to bedrock Slope Deep to water Cutbanks cave	 1.00 1.00 1.00 1.00
364F: Talus-----	91	Not rated		Not rated	
365F: Rock outcrop-----	90	Not rated		Not rated	
369C: Dishno-----	35	Very limited Slope Depth to saturated zone Depth to bedrock Water erosion	 1.00 0.86 0.77 0.01	Very limited Depth to saturated zone Cutbanks cave Depth to bedrock Slope Large stones	 1.00 1.00 0.77 0.63 0.08

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
369C: Gogebic-----	30	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to thick cemented pan	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Cutbanks cave	1.00
		Water erosion	0.56	Slope	0.63
		Droughty	0.05	Dense layer	0.50
Peshekee-----	15	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Deep to water	1.00
		Water erosion	0.56	Cutbanks cave	1.00
		Droughty	0.39	Slope	0.63
				Large stones	0.02
Rock outcrop-----	15	Not rated		Not rated	
369D: Dishno-----	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Depth to saturated zone	0.86	Depth to saturated zone	1.00
		Depth to bedrock	0.77	Cutbanks cave	1.00
		Water erosion	0.01	Depth to bedrock	0.77
				Large stones	0.08
Gogebic-----	30	Very limited		Very limited	
		Slope	1.00	Depth to thick cemented pan	1.00
		Depth to cemented pan	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Water erosion	0.56	Cutbanks cave	1.00
		Droughty	0.05	Dense layer	0.50
Peshekee-----	15	Very limited		Very limited	
		Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Water erosion	0.56	Deep to water	1.00
		Droughty	0.39	Cutbanks cave	1.00
				Large stones	0.02
Rock outcrop-----	15	Not rated		Not rated	
369E: Michigamme-----	30	Very limited		Very limited	
		Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Restricted permeability	1.00	Deep to water	1.00
		Water erosion	0.56	Cutbanks cave	1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
369E:					
Schweitzer-----	25	Very limited		Very limited	
		Slope	1.00	Depth to thick	1.00
		Depth to cemented pan	1.00	cemented pan	
		Cobble content	0.86	Slope	1.00
		Water erosion	0.17	Cutbanks cave	1.00
		Droughty	0.01	Deep to water	1.00
				Dense layer	0.50
Peshekee-----	20	Very limited		Very limited	
		Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Water erosion	0.56	Deep to water	1.00
		Droughty	0.39	Cutbanks cave	1.00
				Large stones	0.02
Rock outcrop-----	15	Not rated		Not rated	
369F:					
Michigamme-----	30	Very limited		Very limited	
		Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Restricted	1.00	Deep to water	1.00
		permeability		Cutbanks cave	1.00
		Water erosion	0.56		
Schweitzer-----	25	Very limited		Very limited	
		Slope	1.00	Depth to thick	1.00
		Depth to cemented pan	1.00	cemented pan	
		Cobble content	0.86	Slope	1.00
		Water erosion	0.17	Cutbanks cave	1.00
		Droughty	0.01	Deep to water	1.00
				Dense layer	0.50
Peshekee-----	20	Very limited		Very limited	
		Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Water erosion	0.56	Deep to water	1.00
		Droughty	0.39	Cutbanks cave	1.00
				Large stones	0.02
Rock outcrop-----	15	Not rated		Not rated	
370E:					
Peshekee-----	55	Very limited		Very limited	
		Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Water erosion	0.56	Deep to water	1.00
		Droughty	0.39	Cutbanks cave	1.00
				Large stones	0.02
Rock outcrop-----	40	Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
370F: Peshekee-----	55	Very limited Slope Depth to bedrock Water erosion Droughty	 1.00 1.00 0.56 0.39	Very limited Depth to bedrock Slope Deep to water Cutbanks cave Large stones	 1.00 1.00 1.00 1.00 0.02
Rock outcrop-----	40	Not rated		Not rated	
375: Dumps and Pits, mine	95	Not rated		Not rated	
380: Beseman-----	55	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone Frost action Cutbanks cave Ponding Organic matter content	 1.00 1.00 1.00 1.00 1.00
Greenwood-----	40	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone Organic matter content Frost action Ponding Cutbanks cave	 1.00 1.00 1.00 1.00 1.00
382: Cathro-----	45	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone Frost action Cutbanks cave Ponding Organic matter content	 1.00 1.00 1.00 1.00 1.00
Arnheim-----	44	Very limited Depth to saturated zone Water erosion	 1.00 1.00	Very limited Flooding Depth to saturated zone Cutbanks cave Frost action Ponding	 1.00 1.00 1.00 1.00 1.00
388: Gay-----	50	Very limited Depth to saturated zone Water erosion	 1.00 0.56	Very limited Depth to saturated zone Frost action Cutbanks cave Ponding	 1.00 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
388: Tula-----	40	Very limited Depth to cemented pan Depth to saturated zone Cobble content Slope Droughty	 1.00 1.00 0.05 0.04 0.01	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Frost action Dense layer	 1.00 1.00 1.00 1.00 0.50
398B: Tula-----	50	Very limited Depth to cemented pan Depth to saturated zone Cobble content Slope Droughty	 1.00 1.00 0.05 0.04 0.01	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Frost action Dense layer	 1.00 1.00 1.00 1.00 0.50
Gay-----	30	Very limited Depth to saturated zone Water erosion	 1.00 0.56	Very limited Depth to saturated zone Frost action Cutbanks cave Ponding	 1.00 1.00 1.00 1.00
Wakefield-----	15	Very limited Depth to cemented pan Depth to saturated zone Water erosion Slope	 1.00 1.00 1.00 0.16	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave	 1.00 1.00 1.00
418: Loxley-----	45	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone Organic matter content Frost action Too acid Ponding	 1.00 1.00 1.00 1.00 1.00
Beseman-----	41	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone Frost action Cutbanks cave Ponding Organic matter content	 1.00 1.00 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
419: Pleine-----	45	Very limited Depth to saturated zone Water erosion	1.00 0.17	Very limited Depth to saturated zone Cutbanks cave Frost action Ponding	1.00 1.00 1.00 1.00
Cathro-----	30	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Frost action Cutbanks cave Ponding Organic matter content	1.00 1.00 1.00 1.00 1.00
Gay-----	25	Very limited Depth to saturated zone Water erosion	1.00 0.56	Very limited Depth to saturated zone Frost action Cutbanks cave Ponding	1.00 1.00 1.00 1.00
424: Gay-----	85	Very limited Depth to saturated zone Water erosion	1.00 0.56	Very limited Depth to saturated zone Frost action Cutbanks cave Ponding	1.00 1.00 1.00 1.00
425: Foxpaw-----	45	Very limited Depth to saturated zone Water erosion	1.00 0.17	Very limited Depth to saturated zone Cutbanks cave Frost action Ponding	1.00 1.00 1.00 1.00
Gay-----	40	Very limited Depth to saturated zone Water erosion	1.00 0.56	Very limited Depth to saturated zone Frost action Cutbanks cave Ponding	1.00 1.00 1.00 1.00
428C: Gogebic-----	70	Very limited Depth to cemented pan Depth to saturated zone Slope Water erosion Droughty	1.00 1.00 1.00 0.56 0.05	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Slope Dense layer	1.00 1.00 1.00 1.00 0.63 0.50

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
428C: Michigamme-----	25	Very limited Restricted permeability Depth to bedrock Slope Water erosion	 1.00 1.00 1.00 0.56	Very limited Depth to bedrock Deep to water Cutbanks cave Slope	 1.00 1.00 1.00 0.63
428D: Gogebic-----	70	Very limited Slope Depth to cemented pan Depth to saturated zone Water erosion Droughty	 1.00 1.00 1.00 0.56 0.05	Very limited Depth to thick cemented pan Slope Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 1.00 1.00 0.50
Michigamme-----	25	Very limited Slope Restricted permeability Depth to bedrock Water erosion	 1.00 1.00 1.00 0.56	Very limited Depth to bedrock Slope Deep to water Cutbanks cave	 1.00 1.00 1.00 1.00
429B: Gogebic-----	79	Very limited Depth to cemented pan Depth to saturated zone Water erosion Slope Droughty	 1.00 1.00 0.56 0.16 0.05	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 1.00 0.50
Peshekee-----	15	Very limited Depth to bedrock Water erosion Droughty Slope	 1.00 0.56 0.39 0.16	Very limited Depth to bedrock Deep to water Cutbanks cave Large stones	 1.00 1.00 1.00 0.02
429C: Gogebic-----	79	Very limited Depth to cemented pan Depth to saturated zone Slope Water erosion Droughty	 1.00 1.00 1.00 0.56 0.05	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Slope Dense layer	 1.00 1.00 1.00 1.00 0.63 0.50
Peshekee-----	15	Very limited Depth to bedrock Slope Water erosion Droughty	 1.00 1.00 0.56 0.39	Very limited Depth to bedrock Deep to water Cutbanks cave Slope Large stones	 1.00 1.00 1.00 0.63 0.02

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
429D: Gogebic-----	75	Very limited Slope Depth to cemented pan Depth to saturated zone Water erosion Droughty	 1.00 1.00 1.00 0.56 0.05	Very limited Depth to thick cemented pan Slope Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 1.00 0.50
Peshekee-----	15	Very limited Slope Depth to bedrock Water erosion Droughty	 1.00 1.00 0.56 0.39	Very limited Depth to bedrock Slope Deep to water Cutbanks cave Large stones	 1.00 1.00 1.00 1.00 0.02
429E: Schweitzer-----	60	Very limited Slope Depth to cemented pan Cobble content Water erosion Droughty	 1.00 1.00 0.86 0.17 0.01	Very limited Depth to thick cemented pan Slope Cutbanks cave Deep to water Dense layer	 1.00 1.00 1.00 1.00 0.50
Peshekee-----	35	Very limited Slope Depth to bedrock Water erosion Droughty	 1.00 1.00 0.56 0.39	Very limited Depth to bedrock Slope Deep to water Cutbanks cave Large stones	 1.00 1.00 1.00 1.00 0.02
430B: Stutts-----	90	Somewhat limited Droughty Slope	 0.24 0.16	Very limited Cutbanks cave Deep to water	 1.00 1.00
430C: Stutts-----	90	Very limited Slope Droughty	 1.00 0.24	Very limited Cutbanks cave Deep to water Slope	 1.00 1.00 0.63
430D: Stutts-----	90	Very limited Slope Droughty	 1.00 0.24	Very limited Slope Cutbanks cave Deep to water	 1.00 1.00 1.00
430E: Stutts-----	90	Very limited Slope Droughty	 1.00 0.24	Very limited Slope Cutbanks cave Deep to water	 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
432C: Gogebic-----	68	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to thick cemented pan	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Cutbanks cave	1.00
		Water erosion	0.56	Slope	0.63
		Droughty	0.05	Dense layer	0.50
Michigamme-----	15	Very limited		Very limited	
		Restricted permeability	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Deep to water	1.00
		Slope	1.00	Cutbanks cave	1.00
		Water erosion	0.56	Slope	0.63
Rock outcrop-----	15	Not rated		Not rated	
432D: Gogebic-----	68	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to thick cemented pan	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Cutbanks cave	1.00
		Water erosion	0.56	Slope	1.00
		Droughty	0.05	Dense layer	0.50
Michigamme-----	15	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Deep to water	1.00
		Water erosion	0.56	Slope	1.00
				Cutbanks cave	1.00
Rock outcrop-----	15	Not rated		Not rated	
432E: Schweitzer-----	45	Very limited		Very limited	
		Slope	1.00	Depth to thick cemented pan	1.00
		Depth to cemented pan	1.00	Slope	1.00
		Cobble content	0.86	Cutbanks cave	1.00
		Water erosion	0.17	Deep to water	1.00
		Droughty	0.01	Dense layer	0.50
Michigamme-----	20	Very limited		Very limited	
		Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Water erosion	0.56	Deep to water	1.00
				Cutbanks cave	1.00
Rock outcrop-----	20	Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
432F: Schweitzer-----	45	Very limited Slope Depth to cemented pan Cobble content Water erosion Droughty	 1.00 1.00 0.86 0.17 0.01	Very limited Depth to thick cemented pan Slope Cutbanks cave Deep to water Dense layer	 1.00 1.00 1.00 1.00 0.50
Michigamme-----	20	Very limited Slope Depth to bedrock Water erosion	 1.00 1.00 0.56	Very limited Depth to bedrock Slope Deep to water Cutbanks cave	 1.00 1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	
433B: McMillan-----	85	Somewhat limited Water erosion Droughty Slope	 0.17 0.16 0.16	Very limited Cutbanks cave Deep to water	 1.00 1.00
433C: McMillan-----	85	Very limited Slope Water erosion Droughty	 1.00 0.17 0.16	Very limited Cutbanks cave Deep to water Slope	 1.00 1.00 0.63
433D: McMillan-----	85	Very limited Slope Water erosion Droughty	 1.00 0.17 0.16	Very limited Slope Cutbanks cave Deep to water	 1.00 1.00 1.00
435C: Kalkaska-----	45	Very limited Slope Droughty	 1.00 0.28	Very limited Cutbanks cave Deep to water Slope	 1.00 1.00 0.16
Waiska-----	40	Very limited Droughty Slope	 1.00 1.00	Very limited Cutbanks cave Deep to water Slope	 1.00 1.00 0.16
435D: Kalkaska-----	45	Very limited Slope Droughty	 1.00 0.28	Very limited Slope Cutbanks cave Deep to water	 1.00 1.00 1.00
Waiska-----	40	Very limited Slope Droughty	 1.00 1.00	Very limited Slope Cutbanks cave Deep to water	 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
435E:					
Kalkaska-----	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Droughty	0.28	Cutbanks cave	1.00
				Deep to water	1.00
Waiska-----	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Droughty	1.00	Cutbanks cave	1.00
				Deep to water	1.00
437B:					
Manitowish-----	65	Somewhat limited		Very limited	
		Depth to	0.86	Depth to	1.00
		saturated zone		saturated zone	
		Slope	0.04	Cutbanks cave	1.00
Channing-----	20	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	0.17	Cutbanks cave	1.00
		Slope	0.04	Frost action	1.00
448F:					
Rockland-----	75	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Water erosion	0.56	Deep to water	1.00
		Restricted	0.26	Cutbanks cave	1.00
		permeability			
Rock outcrop-----	25	Not rated		Not rated	
449C:					
Flintsteel-----	70	Very limited		Very limited	
		Water erosion	1.00	Depth to	1.00
		Slope	1.00	saturated zone	
		Depth to	1.00	Cutbanks cave	1.00
		saturated zone		Slope	0.63
		Restricted	0.60	Dense layer	0.50
		permeability			
Minocqua-----	30	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	1.00	Cutbanks cave	1.00
				Frost action	1.00
				Ponding	1.00
452F:					
Rockland-----	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Water erosion	0.56	Deep to water	1.00
		Restricted	0.26	Cutbanks cave	1.00
		permeability			

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
460B: Belding-----	55	Very limited Depth to saturated zone Water erosion Restricted permeability	 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Frost action	 1.00 1.00 1.00
Manido-----	25	Somewhat limited Depth to saturated zone Slope	 0.86 0.16	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00
461B: Loggerhead-----	85	Very limited Depth to saturated zone Water erosion Restricted permeability Slope	 1.00 0.56 0.15 0.04	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00
462C: Nonesuch-----	75	Very limited Slope Depth to saturated zone Depth to cemented pan Water erosion Depth to bedrock	 1.00 1.00 0.95 0.89 0.42	Very limited Depth to saturated zone Cutbanks cave Depth to thin cemented pan Dense layer Depth to bedrock	 1.00 1.00 0.95 0.50 0.42
Rock outcrop-----	15	Not rated		Not rated	
509: Cathro-----	45	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone Frost action Cutbanks cave Ponding Organic matter content	 1.00 1.00 1.00 1.00 1.00
Minocqua-----	40	Very limited Depth to saturated zone Water erosion	 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Frost action Ponding	 1.00 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
511A: Gogebic-----	40	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to thick cemented pan	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Water erosion	0.56	Cutbanks cave	1.00
		Slope	0.36	Dense layer	0.50
		Droughty	0.05		
Tula-----	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to thick cemented pan	1.00
		Cobble content	0.05	Depth to saturated zone	1.00
		Droughty	0.01	Cutbanks cave	1.00
				Frost action	1.00
				Dense layer	0.50
Chabeneau-----	15	Very limited		Very limited	
		Water erosion	1.00	Depth to	1.00
		Depth to saturated zone	1.00	saturated zone	
		Slope	0.04	Cutbanks cave	1.00
519B: Gogebic-----	50	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to thick cemented pan	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Water erosion	0.56	Cutbanks cave	1.00
		Slope	0.16	Dense layer	0.50
		Droughty	0.05		
Karlin-----	40	Somewhat limited		Very limited	
		Slope	0.16	Cutbanks cave	1.00
				Deep to water	1.00
519C: Gogebic-----	50	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to thick cemented pan	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Cutbanks cave	1.00
		Water erosion	0.56	Slope	0.63
		Droughty	0.05	Dense layer	0.50
Karlin-----	40	Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00
				Deep to water	1.00
				Slope	0.63

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
519D: Gogebic-----	50	Very limited Slope Depth to cemented pan Depth to saturated zone Water erosion Droughty	 1.00 1.00 1.00 0.56 0.05	Very limited Depth to thick cemented pan Slope Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 1.00 0.50
Karlin-----	40	Very limited Slope	 1.00	Very limited Slope Cutbanks cave Deep to water	 1.00 1.00 1.00
522: Pits, sand and gravel-----	100	Not rated		Not rated	
523D: Gogebic, sandy substratum-----	53	Very limited Depth to cemented pan Depth to saturated zone Slope Water erosion Droughty	 1.00 1.00 1.00 0.56 0.05	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Slope Dense layer	 1.00 1.00 1.00 1.00 0.50
Karlin-----	40	Very limited Slope	 1.00	Very limited Cutbanks cave Deep to water Slope	 1.00 1.00 1.00
524C: Waiska-----	45	Very limited Droughty Slope	 1.00 1.00	Very limited Cutbanks cave Deep to water Slope	 1.00 1.00 0.63
Amasa-----	40	Very limited Water erosion Slope	 1.00 1.00	Very limited Cutbanks cave Deep to water Slope	 1.00 1.00 0.63
524D: Waiska-----	45	Very limited Slope Droughty	 1.00 1.00	Very limited Slope Cutbanks cave Deep to water	 1.00 1.00 1.00
Amasa-----	40	Very limited Slope Water erosion	 1.00 1.00	Very limited Slope Cutbanks cave Deep to water	 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
524E: Waiska-----	45	Very limited Slope Droughty	 1.00 1.00	Very limited Slope Cutbanks cave Deep to water	 1.00 1.00 1.00
Amasa-----	40	Very limited Slope Water erosion	 1.00 1.00	Very limited Slope Cutbanks cave Deep to water	 1.00 1.00 1.00
527B: Wakefield-----	85	Very limited Depth to cemented pan Depth to saturated zone Water erosion Slope	 1.00 1.00 1.00 0.16	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave	 1.00 1.00 1.00
527C: Wakefield-----	85	Very limited Depth to saturated zone Water erosion Slope	 1.00 1.00 1.00	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Slope	 1.00 1.00 1.00 0.63
527D: Wakefield-----	85	Very limited Slope Depth to saturated zone Water erosion	 1.00 1.00 1.00	Very limited Depth to thick cemented pan Slope Depth to saturated zone Cutbanks cave	 1.00 1.00 1.00 1.00
528B: Gogebic-----	48	Very limited Depth to cemented pan Depth to saturated zone Water erosion Slope Droughty	 1.00 1.00 0.56 0.16 0.05	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 0.50
Annalake-----	45	Very limited Water erosion Depth to saturated zone Slope	 1.00 1.00 0.16	Very limited Depth to saturated zone Cutbanks cave Frost action	 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
528C: Gogebic-----	48	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to thick cemented pan	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Cutbanks cave	1.00
		Water erosion	0.56	Slope	0.63
		Droughty	0.05	Dense layer	0.50
Annalake-----	45	Very limited		Very limited	
		Water erosion	1.00	Depth to	1.00
		Slope	1.00	saturated zone	
		Depth to	1.00	Cutbanks cave	1.00
		saturated zone		Frost action	1.00
				Slope	0.63
528D: Gogebic-----	48	Very limited		Very limited	
		Slope	1.00	Depth to thick	1.00
		Depth to cemented pan	1.00	cemented pan	
		Depth to	1.00	Slope	1.00
		saturated zone		Depth to	1.00
		Water erosion	0.56	saturated zone	
		Droughty	0.05	Cutbanks cave	1.00
				Dense layer	0.50
Annalake-----	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Water erosion	1.00	Depth to	1.00
		Depth to	1.00	saturated zone	
		saturated zone		Cutbanks cave	1.00
				Frost action	1.00
551B: Gogebic-----	65	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to thick	1.00
		Depth to	1.00	cemented pan	
		saturated zone		Depth to	1.00
		Water erosion	0.56	saturated zone	
		Slope	0.36	Cutbanks cave	1.00
		Droughty	0.05	Dense layer	0.50
Dishno-----	30	Somewhat limited		Very limited	
		Depth to bedrock	0.96	Depth to	1.00
		Depth to	0.86	saturated zone	
		saturated zone		Cutbanks cave	1.00
		Slope	0.16	Depth to bedrock	0.96
		Water erosion	0.01	Large stones	0.08
566: Beach, rubbly-----	95	Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
576B:					
Flintsteel-----	45	Very limited		Very limited	
		Water erosion	1.00	Depth to	1.00
		Depth to	1.00	saturated zone	
		saturated zone		Cutbanks cave	1.00
		Restricted	0.60	Dense layer	0.50
		permeability			
		Slope	0.04		
Loggerhead-----	40	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	0.56	Cutbanks cave	1.00
		Restricted	0.15		
		permeability			
		Slope	0.04		
576C:					
Flintsteel-----	45	Very limited		Very limited	
		Water erosion	1.00	Depth to	1.00
		Slope	1.00	saturated zone	
		Depth to	1.00	Cutbanks cave	1.00
		saturated zone		Dense layer	0.50
		Restricted	0.60	Slope	0.16
		permeability			
Loggerhead-----	40	Very limited		Very limited	
		Slope	1.00	Depth to	1.00
		Depth to	1.00	saturated zone	
		saturated zone		Cutbanks cave	1.00
		Water erosion	0.56	Slope	0.16
		Restricted	0.15		
		permeability			
576D:					
Flintsteel-----	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Water erosion	1.00	Depth to	1.00
		Depth to	1.00	saturated zone	
		saturated zone		Cutbanks cave	1.00
		Restricted	0.60	Dense layer	0.50
		permeability			
Loggerhead-----	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	0.56	Cutbanks cave	1.00
		Restricted	0.15		
		permeability			
577B:					
Loggerhead-----	35	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	0.56	Cutbanks cave	1.00
		Restricted	0.15		
		permeability			
		Slope	0.04		

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
577B:					
Chabeneau-----	30	Very limited		Very limited	
		Water erosion	1.00	Depth to	1.00
		Depth to	1.00	saturated zone	
		saturated zone		Cutbanks cave	1.00
		Slope	0.36		
Arcadian-----	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Deep to water	1.00
		Slope	0.16	Cutbanks cave	1.00
577C:					
Loggerhead-----	35	Very limited		Very limited	
		Slope	1.00	Depth to	1.00
		Depth to	1.00	saturated zone	
		saturated zone		Cutbanks cave	1.00
		Water erosion	0.56	Slope	0.16
		Restricted	0.15		
		permeability			
Chabeneau-----	30	Very limited		Very limited	
		Water erosion	1.00	Depth to	1.00
		Depth to	1.00	saturated zone	
		saturated zone		Cutbanks cave	1.00
		Slope	0.83		
Arcadian-----	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Deep to water	1.00
		Slope	1.00	Cutbanks cave	1.00
				Slope	0.63
577D:					
Loggerhead-----	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	0.56	Cutbanks cave	1.00
		Restricted	0.15		
		permeability			
Chabeneau-----	30	Very limited		Very limited	
		Water erosion	1.00	Depth to	1.00
		Slope	1.00	saturated zone	
		Depth to	1.00	Cutbanks cave	1.00
		saturated zone		Slope	1.00
Arcadian-----	25	Very limited		Very limited	
		Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Droughty	1.00	Deep to water	1.00
				Cutbanks cave	1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
578D: Arcadian-----	59	Very limited Depth to bedrock Droughty Slope	 1.00 1.00 1.00	Very limited Depth to bedrock Deep to water Slope Cutbanks cave	 1.00 1.00 1.00 1.00
Keweenaw-----	40	Very limited Slope Droughty	 1.00 0.81	Very limited Cutbanks cave Deep to water Slope	 1.00 1.00 1.00
625B: Fence-----	95	Very limited Water erosion Depth to saturated zone Restricted permeability Slope	 1.00 1.00 0.21 0.16	Very limited Depth to saturated zone Frost action Cutbanks cave	 1.00 1.00 1.00
625C: Fence-----	98	Very limited Water erosion Slope Depth to saturated zone Restricted permeability	 1.00 1.00 1.00 0.21	Very limited Depth to saturated zone Frost action Cutbanks cave Slope	 1.00 1.00 1.00 0.63
626D: Sporley-----	85	Very limited Slope Water erosion Restricted permeability	 1.00 1.00 0.22	Very limited Slope Frost action Deep to water Cutbanks cave	 1.00 1.00 1.00 1.00
626E: Sporley-----	90	Very limited Slope Water erosion Restricted permeability	 1.00 1.00 0.22	Very limited Slope Frost action Deep to water Cutbanks cave	 1.00 1.00 1.00 1.00
648B: Annalake-----	93	Very limited Water erosion Depth to saturated zone Slope	 1.00 1.00 0.16	Very limited Depth to saturated zone Cutbanks cave Frost action	 1.00 1.00 1.00
648C: Annalake-----	93	Very limited Water erosion Slope Depth to saturated zone	 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Frost action Slope	 1.00 1.00 1.00 0.63

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
650: Leafriver-----	90	Very limited Depth to saturated zone Droughty	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	1.00 1.00 1.00 1.00
652B: Manido-----	52	Somewhat limited Depth to saturated zone Slope	0.86 0.16	Very limited Depth to saturated zone Cutbanks cave	1.00 1.00 1.00
Annalake-----	24	Very limited Water erosion Depth to saturated zone Slope	1.00 1.00 0.16	Very limited Depth to saturated zone Cutbanks cave Frost action	1.00 1.00 1.00 1.00
656B: Stutts-----	60	Somewhat limited Droughty Slope	0.24 0.16	Very limited Cutbanks cave Deep to water	1.00 1.00 1.00
Zandi-----	30	Somewhat limited Water erosion Slope	0.17 0.16	Very limited Cutbanks cave Deep to water	1.00 1.00 1.00
656C: Stutts-----	60	Very limited Slope Droughty	1.00 0.24	Very limited Cutbanks cave Deep to water Slope	1.00 1.00 1.00 0.63
Zandi-----	30	Very limited Slope Water erosion	1.00 0.17	Very limited Cutbanks cave Deep to water Slope	1.00 1.00 1.00 0.63
656D: Stutts-----	60	Very limited Slope Droughty	1.00 0.24	Very limited Slope Cutbanks cave Deep to water	1.00 1.00 1.00 1.00
Zandi-----	30	Very limited Slope Water erosion	1.00 0.17	Very limited Slope Cutbanks cave Deep to water	1.00 1.00 1.00 1.00
680B: Tonkey-----	37	Very limited Depth to saturated zone Water erosion	1.00 0.89	Very limited Depth to saturated zone Frost action Cutbanks cave Ponding	1.00 1.00 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
680B: Pleine-----	32	Very limited Depth to saturated zone Water erosion	1.00 0.17	Very limited Depth to saturated zone Cutbanks cave Frost action Ponding	1.00 1.00 1.00 1.00
Annalake-----	20	Very limited Water erosion Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Frost action	1.00 1.00 1.00
681: Cathro-----	45	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Frost action Cutbanks cave Ponding Organic matter content	1.00 1.00 1.00 1.00 1.00
Tonkey-----	37	Very limited Depth to saturated zone Water erosion	1.00 0.89	Very limited Depth to saturated zone Frost action Cutbanks cave Ponding	1.00 1.00 1.00 1.00
683B: Amasa-----	45	Very limited Water erosion Slope	1.00 0.16	Very limited Cutbanks cave Deep to water	1.00 1.00
Oldman-----	40	Very limited Depth to cemented pan Depth to saturated zone Cobble content Droughty Slope	1.00 1.00 1.00 0.74 0.16	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Large stones Dense layer	1.00 1.00 1.00 0.96 0.50
683C: Amasa-----	45	Very limited Water erosion Slope	1.00 1.00	Very limited Cutbanks cave Deep to water Slope	1.00 1.00 0.63
Oldman-----	40	Very limited Depth to cemented pan Depth to saturated zone Slope Cobble content Droughty	1.00 1.00 1.00 1.00 0.74	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Large stones Slope	1.00 1.00 1.00 0.96 0.63

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
683D:					
Amasa-----	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Water erosion	1.00	Cutbanks cave	1.00
				Deep to water	1.00
Oldman-----	40	Very limited		Very limited	
		Slope	1.00	Depth to thick	1.00
		Depth to cemented	1.00	cemented pan	
		pan		Slope	1.00
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Cobble content	1.00	Cutbanks cave	1.00
		Droughty	0.74	Large stones	0.96
684B:					
Amasa-----	70	Very limited		Very limited	
		Water erosion	1.00	Cutbanks cave	1.00
		Slope	0.36	Deep to water	1.00
684C:					
Amasa-----	78	Very limited		Very limited	
		Water erosion	1.00	Cutbanks cave	1.00
		Slope	1.00	Deep to water	1.00
				Slope	0.63
684D:					
Amasa-----	78	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Water erosion	1.00	Cutbanks cave	1.00
				Deep to water	1.00
686B:					
Annalake-----	40	Very limited		Very limited	
		Water erosion	1.00	Depth to	1.00
		Depth to	1.00	saturated zone	
		saturated zone		Cutbanks cave	1.00
		Slope	0.16	Frost action	1.00
Robago-----	40	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	1.00	Cutbanks cave	1.00
		Slope	0.04	Frost action	1.00
688:					
Cathro-----	60	Very limited		Very limited	
		Depth to	1.00	Flooding	1.00
		saturated zone		Depth to	1.00
				saturated zone	
				Frost action	1.00
				Cutbanks cave	1.00
				Ponding	1.00
Leafriver-----	40	Very limited		Very limited	
		Depth to	1.00	Flooding	1.00
		saturated zone		Depth to	1.00
		Droughty	1.00	saturated zone	
				Cutbanks cave	1.00
				Ponding	1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
689B: Chabeneau-----	35	Very limited Water erosion Depth to saturated zone Slope	 1.00 1.00 0.04	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00
Channing-----	30	Very limited Depth to saturated zone Water erosion Slope	 1.00 0.17 0.04	Very limited Depth to saturated zone Cutbanks cave Frost action	 1.00 1.00 1.00
Gogebic-----	25	Very limited Depth to cemented pan Depth to saturated zone Water erosion Slope Droughty	 1.00 1.00 0.56 0.36 0.05	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 1.00 0.50
691B: Dishno-----	35	Somewhat limited Depth to bedrock Depth to saturated zone Slope Water erosion	 0.96 0.86 0.16 0.01	Very limited Depth to saturated zone Cutbanks cave Depth to bedrock Large stones	 1.00 1.00 0.96 0.08
Tula-----	30	Very limited Depth to saturated zone Cobble content Slope Droughty	 1.00 0.05 0.04 0.01	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Frost action Dense layer	 1.00 1.00 1.00 1.00 0.50
Rock outcrop-----	20	Not rated		Not rated	
691D: Dishno-----	35	Very limited Slope Depth to bedrock Depth to saturated zone Water erosion	 1.00 0.96 0.86 0.01	Very limited Depth to saturated zone Cutbanks cave Slope Depth to bedrock Large stones	 1.00 1.00 1.00 0.96 0.08
Tula-----	30	Very limited Depth to saturated zone Cobble content Slope Droughty	 1.00 0.05 0.04 0.01	Very limited Depth to thick cemented pan Depth to saturated zone Cutbanks cave Frost action Dense layer	 1.00 1.00 1.00 1.00 0.50
Rock outcrop-----	20	Not rated		Not rated	

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
693B: Chabeneau-----	50	Very limited Water erosion Depth to saturated zone Slope	 1.00 1.00 0.04	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00
Annalake-----	40	Very limited Water erosion Depth to saturated zone Slope	 1.00 1.00 0.16	Very limited Depth to saturated zone Cutbanks cave Frost action	 1.00 1.00 1.00
694D: Annalake-----	40	Very limited Water erosion Slope Depth to saturated zone	 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Frost action Slope	 1.00 1.00 1.00 1.00
Stutts-----	35	Very limited Slope Droughty	 1.00 0.24	Very limited Cutbanks cave Deep to water Slope	 1.00 1.00 1.00
Arnheim-----	25	Very limited Depth to saturated zone Water erosion	 1.00 1.00	Very limited Flooding Depth to saturated zone Cutbanks cave Frost action Ponding	 1.00 1.00 1.00 1.00 1.00
5170: Minocqua-----	50	Very limited Depth to saturated zone Water erosion	 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Frost action Ponding	 1.00 1.00 1.00 1.00
Pleine-----	30	Very limited Depth to saturated zone Water erosion	 1.00 0.17	Very limited Depth to saturated zone Cutbanks cave Frost action Ponding	 1.00 1.00 1.00 1.00
Cathro-----	15	Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone Frost action Cutbanks cave Ponding Organic matter content	 1.00 1.00 1.00 1.00 1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
5171B:					
Tula-----	60	Very limited		Very limited	
		Depth to	1.00	Depth to thick	1.00
		saturated zone		cemented pan	
		Water erosion	0.17	Depth to	1.00
		Slope	0.04	saturated zone	
		Droughty	0.03	Cutbanks cave	1.00
				Frost action	1.00
				Dense layer	0.50
Wormet-----	15	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Slope	0.04	Cutbanks cave	1.00
		Water erosion	0.01		
Gogebic, sandy substratum-----	15	Very limited		Very limited	
		Depth to cemented	1.00	Depth to thick	1.00
		pan		cemented pan	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	0.56	Cutbanks cave	1.00
		Slope	0.36	Dense layer	0.50
		Droughty	0.05		
5172B:					
Gogebic, sandy substratum-----	60	Very limited		Very limited	
		Depth to cemented	1.00	Depth to thick	1.00
		pan		cemented pan	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
		Water erosion	0.56	Cutbanks cave	1.00
		Slope	0.36	Dense layer	0.50
		Droughty	0.05		
Pence-----	15	Somewhat limited		Very limited	
		Water erosion	0.17	Cutbanks cave	1.00
		Slope	0.16	Deep to water	1.00
		Droughty	0.10		
Cathro-----	15	Very limited		Very limited	
		Depth to	1.00	Depth to	1.00
		saturated zone		saturated zone	
				Frost action	1.00
				Cutbanks cave	1.00
				Ponding	1.00
				Organic matter content	1.00

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
5172C: Gogebic, sandy substratum-----	60	Very limited		Very limited	
		Depth to cemented pan	1.00	Depth to thick cemented pan	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slope	1.00	Cutbanks cave	1.00
		Water erosion	0.56	Slope	0.63
		Droughty	0.05	Dense layer	0.50
Pence-----	15	Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00
		Water erosion	0.17	Deep to water	1.00
		Droughty	0.10	Slope	0.63
Cathro-----	15	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
				Frost action	1.00
				Cutbanks cave	1.00
				Ponding	1.00
				Organic matter content	1.00
5172D: Gogebic, sandy substratum-----	60	Very limited		Very limited	
		Slope	1.00	Depth to thick cemented pan	1.00
		Depth to cemented pan	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Water erosion	0.56	Cutbanks cave	1.00
		Droughty	0.05	Dense layer	0.50
Pence-----	15	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Water erosion	0.17	Cutbanks cave	1.00
		Droughty	0.10	Deep to water	1.00
Cathro-----	15	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
				Frost action	1.00
				Cutbanks cave	1.00
				Ponding	1.00
				Organic matter content	1.00
5173D: Gogebic, sandy substratum-----	60	Very limited		Very limited	
		Slope	1.00	Depth to thick cemented pan	1.00
		Depth to cemented pan	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Water erosion	0.56	Cutbanks cave	1.00
		Droughty	0.05	Dense layer	0.50

Soil Survey of Gogebic County, Michigan

Table 15b.--Water Management--Continued

Map symbol and soil name	Pct. of map unit	Grassed waterways		Drainage	
		Rating class and limiting features	Value	Rating class and limiting features	Value
5173D: Pence-----	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Water erosion	0.17	Cutbanks cave	1.00
		Droughty	0.10	Deep to water	1.00

Table 16.--Engineering Index Properties

(Absence of an entry indicates that data were not estimated)

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
7:												
Histosols-----	0-51	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	51-80	Variable	---	---	---	---	0	0	0	0	---	---
Aquents-----	0-80	Variable	---	---	---	---	---	---	---	---	---	---
10:												
Witbeck-----	0-6	Muck	PT	A-8	50-73	0	100	100	100	90-100	---	---
	6-10	Stony mucky silt loam, mucky silt loam, silt loam	ML	A-4	50-73	0	100	100	50-100	50-100	0-47	NP-18
	10-22	Fine sandy loam	SC-SM	A-4	0-15	0-15	53-99	50-90	30-80	10-65	0-33	NP-13
	22-30	Very fine sandy loam, gravelly very fine sandy loam, fine sandy loam	ML	A-4	0-15	0-15	53-99	50-90	45-90	15-70	0-38	NP-19
	30-39	Very fine sandy loam, gravelly very fine sandy loam, fine sandy loam	ML	A-4	0-15	0-15	53-99	50-90	45-90	15-70	0-38	NP-19
	39-60	Gravelly very fine sandy loam, very fine sandy loam, gravelly fine sandy loam	SC-SM	A-4	0-15	0-15	53-99	50-90	30-80	10-65	0-38	NP-19

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
12A: Monico-----	0-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	2-4	Loam, cobbly loam, silt loam	ML	A-4	0	0-30	74-100	70-100	52-100	50-90	22-47	3-18
	4-7	Cobbly loam, loam, silt loam	ML	A-4	0	0-22	74-100	70-100	52-100	50-90	0-41	NP-19
	7-15	Loam, sandy loam, cobbly sandy loam	SC-SM	A-2-4	0	0-22	63-99	60-90	45-80	10-65	0-43	NP-18
	15-28	Sandy loam, loam, cobbly sandy loam	SC-SM	A-2-4	0	0-22	63-99	60-90	35-80	10-65	0-43	NP-18
	28-38	Loam, sandy loam, cobbly sandy loam	SC-SM	A-2-4	0	0-22	63-99	60-90	45-80	10-65	0-39	NP-19
	38-47	Cobbly sandy loam, sandy loam	SC-SM	A-2-4	0	0-22	63-99	60-90	35-80	10-65	0-32	NP-13
	47-65	Sandy loam, cobbly sandy loam	SC-SM	A-2-4	0	0-19	61-92	61-92	41-81	18-46	0-32	NP-13
13B: Argonne-----	0-2	Highly decomposed plant material	PT	A-8	0	0-15	100	100	100	90-100	---	---
	2-5	Fine sandy loam, gravelly sandy loam, sandy loam			0	0-15	74-100	70-100	40-90	10-70	0-35	NP-13
	5-9	Gravelly fine sandy loam, sandy loam, loam, fine sandy loam	SM	A-4	0	0-15	74-100	70-100	40-90	10-70	0-35	NP-13
	9-15	Gravelly loam, fine sandy loam, sandy loam	SM	A-4	0	0-15	74-100	70-100	40-90	10-70	0-37	NP-13

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
13B: (Argonne)	In				Pct	Pct					Pct	
	15-29	Cobbly sandy loam, gravelly loamy sand, sandy loam, fine sandy loam	SC-SM	A-2-4	0	0-30	53-99	50-90	30-80	10-65	0-32	NP-13
	29-39	Fine sandy loam, loamy sand, sandy loam, gravelly sandy loam	SM	A-4	0	0-30	53-99	50-90	30-80	10-65	0-32	NP-13
	39-54	Sandy loam, cobbly sandy loam, gravelly sandy loam	SC-SM	A-2-4	0	0-30	53-99	50-90	30-80	10-65	0-25	NP-7
	54-82	Gravelly sandy loam, cobbly sandy loam	SC-SM	A-2-4	0	0-30	53-99	50-90	30-80	10-65	0-21	NP-4
13C: Argonne-----	0-2	Highly decomposed plant material	PT	A-8	0	0-15	100	100	100	90-100	---	---
	2-5	Gravelly sandy loam, sandy loam, fine sandy loam			0	0-15	74-100	70-100	40-90	10-70	0-35	NP-13
	5-9	Gravelly fine sandy loam, sandy loam, loam, fine sandy loam	SM	A-4	0	0-15	74-100	70-100	40-90	10-70	0-35	NP-13
	9-15	Sandy loam, fine sandy loam, gravelly loam	SM	A-4	0	0-15	74-100	70-100	40-90	10-70	0-37	NP-13
	15-29	Cobbly sandy loam, gravelly loamy sand, sandy loam, fine sandy loam	SC-SM	A-2-4	0	0-30	53-99	50-90	30-80	10-65	0-32	NP-13

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
13C: (Argonne)	29-39	Fine sandy loam, loamy sand, sandy loam, gravelly sandy loam	SM	A-4	0	0-30	53-99	50-90	30-80	10-65	0-32	NP-13
	39-54	Sandy loam, cobbly sandy loam, gravelly sandy loam	SC-SM	A-2-4	0	0-30	53-99	50-90	30-80	10-65	0-25	NP-7
	54-82	Gravelly sandy loam, cobbly sandy loam	SC-SM	A-2-4	0	0-30	53-99	50-90	30-80	10-65	0-21	NP-4
13D: Argonne-----	0-2	Highly decomposed plant material	PT	A-8	0	0-15	100	100	100	90-100	---	---
	2-5	Fine sandy loam, sandy loam, gravelly sandy loam			0	0-15	74-100	70-100	40-90	10-70	0-35	NP-13
	5-9	Gravelly fine sandy loam, sandy loam, loam, fine sandy loam	SM	A-4	0	0-15	74-100	70-100	40-90	10-70	0-35	NP-13
	9-15	Gravelly loam, sandy loam, fine sandy loam	SM	A-4	0	0-15	74-100	70-100	40-90	10-70	0-37	NP-13
	15-29	Cobbly sandy loam, gravelly loamy sand, sandy loam, fine sandy loam	SC-SM	A-2-4	0	0-30	53-99	50-90	30-80	10-65	0-32	NP-13
	29-39	Fine sandy loam, loamy sand, sandy loam, gravelly sandy loam	SM	A-4	0	0-30	53-99	50-90	30-80	10-65	0-32	NP-13
	39-54	Sandy loam, cobbly sandy loam, gravelly sandy loam	SC-SM	A-2-4	0	0-30	53-99	50-90	30-80	10-65	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
13D: (Argonne)	54-82	Gravelly sandy loam, cobbly sandy loam	SC-SM	A-2-4	0	0-30	53-99	50-90	30-80	10-65	0-21	NP-4
15B: Wabeno-----	0-2	Silt loam	CL-ML	A-4	0	0-15	89-100	85-100	45-100	45-100	0-47	NP-18
	2-4	Silt loam	CL-ML	A-4	0	0-15	89-100	85-100	45-100	45-100	0-41	NP-19
	4-11	Silt loam	CL-ML	A-4	0	0-15	63-99	60-90	30-90	30-90	0-43	NP-18
	11-23	Silt loam	CL-ML	A-4	0	0-30	63-99	60-90	30-90	30-90	0-43	NP-18
	23-32	Silt loam	CL-ML	A-4	0	0-30	63-99	60-90	30-90	30-90	0-38	NP-19
	32-42	Cobbly sandy loam, loam, cobbly loamy sand, sandy loam, very fine sandy loam	CL-ML	A-4	0	0-30	63-99	60-90	50-90	20-70	0-32	NP-13
	42-50	Sandy loam, gravelly sandy loam	SC-SM	A-2-4	0	0-30	63-99	60-90	35-65	10-37	0-32	NP-13
	50-60	Cobbly sandy loam, gravelly loamy sand, gravelly sandy loam, loamy sand, sandy loam	SC-SM	A-2-4	0	0-30	63-99	60-90	35-65	10-37	0-32	NP-13
15C: Wabeno-----	0-2	Silt loam	CL-ML	A-4	0	0-15	89-100	85-100	45-100	45-100	0-47	NP-18
	2-4	Silt loam	CL-ML	A-4	0	0-15	89-100	85-100	45-100	45-100	0-41	NP-19
	4-11	Silt loam	CL-ML	A-4	0	0-15	63-99	60-90	30-90	30-90	0-43	NP-18
	11-23	Silt loam	CL-ML	A-4	0	0-30	63-99	60-90	30-90	30-90	0-43	NP-18
	23-32	Silt loam	CL-ML	A-4	0	0-30	63-99	60-90	30-90	30-90	0-38	NP-19
	32-42	Sandy loam, very fine sandy loam, cobbly loamy sand, cobbly sandy loam, loam	CL-ML	A-4	0	0-30	63-99	60-90	50-90	20-70	0-32	NP-13
	42-50	Gravelly sandy loam, sandy loam	SC-SM	A-2-4	0	0-30	63-99	60-90	35-65	10-37	0-32	NP-13

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
15C: (Wabeno)	50-60	Sandy loam, gravelly sandy loam, cobbly sandy loam, gravelly loamy sand, loamy sand	SC-SM	A-2-4	0	0-30	63-99	60-90	35-65	10-37	0-32	NP-13
16A: Fence-----	0-6	Silt loam	CL-ML, ML	A-4	0	0	100	96-100	90-100	70-100	20-30	NP-9
	6-7	Silt loam, very fine sandy loam, silt	CL-ML, ML	A-4	0	0	100	96-100	85-100	50-100	0-30	NP-7
	7-13	Silt loam, very fine sandy loam	CL-ML, ML	A-4	0	0	100	96-100	85-100	50-100	15-30	NP-7
	13-15	Silt loam, very fine sandy loam, silt	CL-ML, ML	A-4	0	0	100	96-100	85-100	50-100	15-30	NP-7
	15-20	Silt loam, very fine sandy loam, silt	CL-ML, ML	A-4	0	0	100	96-100	85-100	50-100	15-30	NP-7
	20-35	Silt loam, silt	CL-ML, ML	A-4	0	0	100	96-100	90-100	70-100	20-30	NP-9
	35-80	Stratified silt loam to silt	CL-ML, ML	A-4	0	0	100	96-100	90-100	70-100	20-30	NP-9
17B: Lode-----	0-7	Silt loam	CL-ML	A-4	0	0-15	74-100	70-98	35-98	35-98	0-47	NP-18
	7-18	Gravelly sandy loam, gravelly fine sandy loam, gravelly loam, fine sandy loam, loam, sandy loam	CL	A-4	0	0-14	66-98	66-98	47-96	31-72	0-43	NP-18
	18-24	Loam, sandy loam, gravelly loam, gravelly fine sandy loam, gravelly sandy loam, fine sandy loam	CL	A-4	0	0-15	74-100	70-98	35-98	35-88	0-43	NP-18

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
17B: (Lode)	24-31	Gravelly fine sandy loam, gravelly sandy loam, fine sandy loam, sandy loam	SC-SM	A-2-4	0	0-15	74-100	70-98	40-88	10-53	0-37	NP-13
	31-37	Coarse sand	SM	A-2-4	0	0-15	47-99	45-90	0-70	0-35	0-23	NP-6
	37-59	Gravelly very coarse sand, very gravelly gravelly sand, sand, coarse sand	SM	A-2-4	0	0-15	47-99	45-90	0-80	0-35	0-23	NP-6
	59-80	Gravelly very coarse sand, very gravelly gravelly sand, sand, coarse sand	SM	A-2-4	0	0-15	47-99	45-90	0-80	0-35	0-23	NP-6
17C: Lode-----	0-7	Silt loam	CL-ML	A-4	0	0-15	74-100	70-98	35-98	35-98	0-47	NP-18
	7-18	Loam, fine sandy loam, sandy loam, gravelly fine sandy loam, gravelly sandy loam, gravelly loam	CL	A-4	0	0-14	66-98	66-98	47-96	31-72	0-43	NP-18
	18-24	Gravelly fine sandy loam, gravelly sandy loam, fine sandy loam, loam, sandy loam, gravelly loam	CL	A-4	0	0-15	74-100	70-98	35-98	35-88	0-43	NP-18

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
17C: (Lode)	In				Pct	Pct					Pct	
	24-31	Gravelly fine sandy loam, sandy loam, gravelly sandy loam, fine sandy loam	SC-SM	A-2-4	0	0-15	74-100	70-98	40-88	10-53	0-37	NP-13
	31-37	Coarse sand	SM	A-2-4	0	0-15	47-99	45-90	0-70	0-35	0-23	NP-6
	37-59	Sand, coarse sand, very gravelly gravelly sand, gravelly very gravelly coarse sand	SM	A-2-4	0	0-15	47-99	45-90	0-80	0-35	0-23	NP-6
	59-80	Gravelly very gravelly coarse sand, very gravelly gravelly sand, coarse sand, sand	SM	A-2-4	0	0-15	47-99	45-90	0-80	0-35	0-23	NP-6
20B: Pence-----	0-2	Moderately decomposed plant material	PT	A-8	0-5	0-15	100	100	100	100	---	NP
	2-6	Fine sandy loam, sandy loam, gravelly loamy sand	SM, ML, CL- ML, SC-SM	A-4, A-2-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	6-9	Fine sandy loam, gravelly sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	9-13	Fine sandy loam, gravelly fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	13-16	Coarse sand, loamy sand, gravelly coarse sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	16-31	Gravelly coarse sand, sand, coarse sand, gravelly loamy sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	31-80	Gravelly coarse sand, sand	SP, SP-SM	A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-20	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
20B: Lode-----	0-7	Silt loam	CL-ML	A-4	0	0-15	74-100	70-98	35-98	35-98	0-47	NP-18
	7-18	Gravelly sandy loam, gravelly fine sandy loam, gravelly loam, sandy loam, fine sandy loam, loam	CL	A-4	0	0-14	66-98	66-98	47-96	31-72	0-43	NP-18
	18-24	Fine sandy loam, gravelly fine sandy loam, gravelly sandy loam, gravelly loam, loam, sandy loam	CL	A-4	0	0-15	74-100	70-98	35-98	35-88	0-43	NP-18
	24-31	Gravelly fine sandy loam, sandy loam, fine sandy loam, gravelly sandy loam	SC-SM	A-2-4	0	0-15	74-100	70-98	40-88	10-53	0-37	NP-13
	31-37	Coarse sand	SM	A-2-4	0	0-15	47-99	45-90	0-70	0-35	0-23	NP-6
	37-59	Coarse sand, sand, very gravelly gravelly sand, gravelly very gravelly coarse sand	SM	A-2-4	0	0-15	47-99	45-90	0-80	0-35	0-23	NP-6
	59-80	Coarse sand, sand, gravelly very gravelly coarse sand, very gravelly gravelly sand	SM	A-2-4	0	0-15	47-99	45-90	0-80	0-35	0-23	NP-6

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
20C: Pence-----	0-2	Moderately decomposed plant material	PT	A-8	0-5	0-15	100	100	100	100	---	NP
	2-6	Fine sandy loam, gravelly loamy sand, sandy loam	SM, ML, CL- ML, SC-SM	A-4, A-2-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	6-9	Gravelly sandy loam, fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	9-13	Fine sandy loam, gravelly fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	13-16	Loamy sand, coarse sand, gravelly coarse sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	16-31	Gravelly coarse sand, gravelly loamy sand, coarse sand, sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	31-80	Gravelly coarse sand, sand	SP, SP-SM	A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-20	---	NP
21: Minocqua-----	0-4	Muck	PT	A-8	0	0	100	100	100	100	---	NP
	4-15	Silt loam, loam, sandy loam, fine sandy loam, very fine sandy loam	CL, ML, SC, SM	A-2, A-4	0	0-7	80-100	75-100	45-100	25-90	0-35	NP-13
	15-28	Loam, gravelly sandy loam, fine sandy loam	CL, ML, SC, SM	A-1, A-2, A-4	0	0-7	55-100	50-100	30-95	15-80	0-28	NP-9
	28-60	Stratified sand to gravelly coarse sand	GP, GP-GM, SP, SP-SM	A-1, A-2, A-3	0	0-7	45-100	40-95	15-65	0-15	0-14	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
21: Leafriver-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-14	Muck	PT	A-8	0	0	100	100	100	90-100	---	---
	14-16	Coarse sand, loamy coarse sand, sand, fine sand, loamy fine sand, loamy sand	SM	A-2-4	0	0	79-100	75-100	10-90	10-50	0-32	NP-13
	16-51	Loamy sand, sand, stratified gravelly coarse sand to sand	SM	A-2-4	0	0	79-100	75-100	0-75	0-40	0-27	NP-10
23B: Chabeneau-----	0-1	Moderately decomposed plant material	PT	A-8	0-2	0-8	100	100	100	90-100	---	---
	1-2	Fine sandy loam, silt loam	ML, CL-ML	A-4	0-2	0-8	90-100	75-100	70-100	50-90	0-20	NP-4
	2-5	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	ML, CL-ML	A-4	0-2	0-8	90-100	75-100	70-100	50-90	0-20	NP-4
	5-10	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	CL-ML, ML	A-4	0-2	0-8	90-100	75-100	50-100	30-90	0-20	NP-4
	10-22	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	CL-ML, ML	A-4	0-2	0-8	89-100	75-100	50-100	30-90	0-20	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
23B: (Chabeneau)	22-30	Gravelly sand, gravelly loamy sand, very gravelly loamy coarse sand, sand	GP, SP-SM, SP, SM, GW	A-3, A-1, A-2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP
	30-48	Stratified coarse sand to very gravelly coarse sand	GP, GW, SM, SP, SP-SM	A-3, A-1, A-2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP
	48-121	Stratified sand to gravelly sand, stratified coarse sand to very gravelly coarse sand	GP, GW, SM, SP, SP-SM	A-3, A-1, A-2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP
Karlin-----	0-1	Moderately decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, sandy loam, fine sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-20	NP-10
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-40	NP-12
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-55	0-23	NP-6
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	0-19	NP-2

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
23B: Pence-----	0-2	Moderately decomposed plant material	PT	A-8	0-5	0-15	100	100	100	100	---	NP
	2-6	Fine sandy loam, gravelly loamy sand, sandy loam	SM, ML, CL- ML, SC-SM	A-4, A-2-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	6-9	Gravelly sandy loam, fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	9-13	Gravelly fine sandy loam, fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	13-16	Coarse sand, loamy sand, gravelly coarse sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	16-31	Gravelly coarse sand, gravelly loamy sand, coarse sand, sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	31-80	Gravelly coarse sand, sand	SP, SP-SM	A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-20	---	NP
	26B: Stambaugh-----	0-4	Very fine sandy loam, silt loam	ML	A-4	0	0	95-100	95-100	75-100	45-90	0-40
4-10		Very fine sandy loam, silt loam	ML	A-4	0	0	95-100	95-100	75-100	45-90	0-35	NP-12
10-18		Very fine sandy loam, silt loam	ML	A-4	0	0	95-100	95-100	75-100	45-90	0-35	NP-12
18-22		Very fine sandy loam, silt loam	ML	A-4	0	0	95-100	95-100	75-100	45-90	0-33	NP-12
22-39		Silt loam, very fine sandy loam, silt loam, very fine sandy loam	ML	A-4	0	0	95-100	95-100	75-100	45-90	0-31	NP-12

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
26B: (Stambaugh)	39-50	Gravelly sand, very gravelly sand	SP-SM	A-1	0	0	35-76	25-65	10-45	0-10	0-23	NP-6
	50-80	Very gravelly sand, gravelly sand	SP-SM	A-1	0	0	35-76	25-65	10-45	0-10	0-23	NP-6
27:												
Lupton-----	0-8	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	8-80	Muck	PT	A-8	0	0	100	100	90-100	40-100	---	NP
Tawas-----	0-22	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	22-42	Loamy fine sand, sand	SM, SP-SM	A-2-4, A-3	0	0-10	85-100	85-100	70-90	10-40	0-21	NP-4
	42-80	Sand, gravelly sand, loamy sand	SP-SM, SM	A-3, A-2-4	0	20-45	50-75	50-75	35-65	10-30	0-21	NP-4
28:												
Dawson-----	0-4	Peat	PT	A-8	0	0	100	100	100	100	---	NP
	4-9	Mucky peat	PT	A-8	0	0	100	100	100	100	---	NP
	9-34	Muck	PT	A-8	0	0	100	100	100	100	---	NP
	34-36	Loamy sand, sand	SM, SP	A-2-4, A-3	0	0	98-100	95-100	70-90	0-40	---	NP
	36-39	Sand	SP, SM	A-2-4, A-3	0	0	98-100	95-100	70-90	0-40	---	NP
	39-50	Sand	SP, SM	A-2-4, A-3	0	0	98-100	95-100	70-90	0-40	---	NP
	50-62	Sand	SP	A-3	0	0	98-100	95-100	70-90	0-40	---	NP
Greenwood-----	0-8	Peat	PT	A-8	0	0	100	100	100	90-100	---	NP
	8-11	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	11-65	Mucky peat	PT	A-8	0	0	100	100	90-100	40-100	---	NP
	65-80	Mucky peat	PT	A-8	0	0	100	100	90-100	40-100	---	NP
Loxley-----	0-5	Peat	PT	A-8	0	0	100	100	100	100	---	NP
	5-45	Muck	PT	A-8	0	0	100	100	100	100	---	NP
	45-80	Mucky peat	PT	A-8	0	0	100	100	100	100	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
29B: Pence, very deep water table----	In				Pct	Pct					Pct	
	0-2	Moderately decomposed plant material	PT	A-8	0	0-7	100	100	100	100	---	---
	2-6	Sandy loam, loam, fine sandy loam, loamy sand	SC-SM, SM	A-2-4, A-4	0	0-15	80-100	75-100	45-95	15-55	0-25	NP-7
	6-9	Gravelly sandy loam, fine sandy loam	SM	A-2-4, A-4	0-5	0-10	55-100	11-100	9-100	5-63	0-35	NP-12
	9-13	Gravelly fine sandy loam, fine sandy loam	SM	A-2-4, A-4	0-5	0-10	55-100	11-100	9-100	5-63	0-35	NP-12
	13-16	Coarse sand, gravelly coarse sand, loamy sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-10	55-100	11-100	5-62	1-28	0-30	NP-12
	16-31	Gravelly coarse sand, gravelly loamy sand, coarse sand, sand	SP-SM, SM, SP	A-2-4, A-1-b, A-3	0-5	0-10	56-100	12-100	5-58	1-24	0-25	NP-9
	31-80	Very gravelly coarse sand, sand	GP, SP-SM, SP, GP-GM	A-1, A-3	0-5	0-10	56-100	12-100	9-89	1-20	0-25	NP-9
31: Evart-----	0-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	2-9	Loam	CL	A-4	0	0-8	89-100	85-100	45-100	45-90	0-58	NP-28
	9-19	Loam, sandy loam	SC-SM	A-2-4	0	0-8	89-100	85-100	45-90	10-55	0-41	NP-19
	19-33	Loamy sand, sand, very gravelly loamy sand	SM	A-2-4	0	0-22	58-100	55-100	5-90	5-50	0-27	NP-10
	33-55	Gravelly sand, sand, very gravelly coarse sand	SP-SM	A-1	0	0-22	58-100	55-100	0-75	0-40	0-27	NP-10

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
31: Tawas-----	0-22	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	22-42	Loamy fine sand, sand	SM, SP-SM	A-2-4, A-3	0	0-10	85-100	85-100	70-90	10-40	0-21	NP-4
	42-80	Loamy sand, sand, gravelly sand	SP-SM, SM	A-3, A-2-4	0	20-45	50-75	50-75	35-65	10-30	0-21	NP-4
32A: Net-----	0-2	Slightly decomposed plant material	PT	A-8	0-30	0-30	100	100	100	90-100	---	---
	2-5	Loam, cobbly fine sandy loam	CL-ML, ML	A-4, A-2-4, A-1-b	0-30	0-30	85-100	85-95	40-95	25-90	15-20	NP-6
	5-6	Gravelly silt loam, loam, cobbly fine sandy loam	CL-ML, SC-SM, SM, ML	A-2-4, A-4, A-1-b	0-30	0-30	70-95	50-90	40-90	20-85	15-20	NP-6
	6-7	Gravelly loam, silt loam, cobbly fine sandy loam	CL-ML, SC-SM, SM, ML	A-2-4, A-4, A-1-b	0-30	0-30	70-95	50-90	40-90	20-85	15-20	NP-6
	7-15	Gravelly silt loam, loam, cobbly fine sandy loam	CL-ML, SC-SM, SM, ML	A-1-b, A-2-4, A-4	0-30	0-30	70-95	50-90	40-90	20-85	15-20	NP-6
	15-23	Gravelly fine sandy loam, cobbly loam, cobbly silt loam	CL-ML, SC-SM, SM, ML	A-1-b, A-2-4, A-4	0-30	0-30	70-95	50-90	40-90	20-85	15-20	NP-6
	23-39	Gravelly sandy loam, gravelly loamy sand	SM, SC-SM, ML	A-1-b, A-2-4, A-4	0-15	0-15	55-90	50-75	15-70	10-55	15-20	NP-4
	39-60	Gravelly sandy loam, gravelly loamy sand	SC-SM, SM	A-1-b, A-2-4, A-4	0-15	0-15	55-90	50-75	15-70	10-45	15-20	NP-6

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
35A: Beechwood-----	0-6	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	6-8	Silt loam	CL-ML, SC-SM, SM, ML	A-4	0	0-7	95-100	80-100	65-95	35-80	0-30	NP-11
	8-10	Silt loam, very fine sandy loam, fine sandy loam, loam	CL-ML, ML, SC-SM, SM	A-4	0	0-7	95-100	80-100	65-95	35-80	0-30	NP-11
	10-20	Fine sandy loam, loam, very fine sandy loam, silt loam	CL-ML, ML, SC-SM, SM	A-4	0	0-7	95-100	80-100	65-95	35-80	0-30	NP-11
	20-28	Fine sandy loam, very fine sandy loam, loam, silt loam	CL-ML, ML, SC-SM, SM	A-4	0	0-7	95-100	80-100	65-95	35-80	0-30	NP-11
	28-42	Fine sandy loam, loam, sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0-7	95-100	80-100	65-95	30-70	0-30	NP-11
	42-80	Loam, sandy loam, fine sandy loam	CL-ML, SC-SM, ML, SM	A-4	0	0-7	95-100	80-100	65-95	30-70	0-30	NP-11
36: Gay-----	0-4	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	4-7	Mucky sandy loam, fine sandy loam, loamy sand, cobbly sandy loam	SM	A-2-4, A-4	0-24	0-15	90-100	75-100	35-80	10-50	0-21	NP-4
	7-11	Sandy loam, cobbly sandy loam, loamy sand	SM	A-2-4, A-4	0-24	0-15	90-100	75-100	35-75	10-40	0-21	NP-4
	11-16	Fine sandy loam, sandy loam	SM, SC-SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-28	2-9
	16-30	Sandy loam, fine sandy loam	SM, SC-SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-25	2-7
	30-80	Fine sandy loam, sandy loam	SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-23	2-6

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
36: Pleine-----	0-9	Very cobbly muck	PT	A-8	0-25	7-50	90-100	78-100	75-100	70-100	---	NP
	9-20	Fine sandy loam, sandy loam, very fine sandy loam, loam	SM, ML, CL- ML, SC-SM	A-4	0-25	6-25	90-100	78-100	50-95	30-60	16-25	1-7
	20-33	Fine sandy loam, loam, sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-25	6-25	90-100	78-100	50-95	30-60	16-25	1-7
	33-80	Gravelly sandy loam, fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-25	6-25	70-95	50-78	30-70	10-50	16-25	1-7
37B: Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Cobbly very fine sandy loam, silt loam, gravelly fine sandy loam, sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, cobbly sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
37B: (Gogebic)	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Fine sandy loam, gravelly loamy fine sand, loamy fine sand, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	49-54	Gravelly loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Gravelly sandy loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Gravelly fine sandy loam, cobbly sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
					4	10	40	200				
	In				Pct	Pct					Pct	
37B: Tula-----	0-1	Highly decomposed plant material	PT	A-8	0-7	0-30	100	100	100	100	---	NP
	1-5	Cobbly very fine sandy loam, fine sandy loam	CL-ML, ML, SM	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	5-8	Cobbly very fine sandy loam, fine sandy loam	CL-ML, SM, ML	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	8-20	Cobbly very fine sandy loam, fine sandy loam	CL-ML, SM, ML	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	20-28	Fine sandy loam, gravelly sandy loam	ML, CL-ML, SM	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	28-37	Loamy sand, gravelly sandy loam, fine sandy loam, gravelly loam	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-28	NP-9
	37-62	Fine sandy loam, gravelly sandy loam, gravelly loam, gravelly loamy sand	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-30	NP-11
	62-80	Fine sandy loam, gravelly sandy loam	ML, SC-SM, SM	A-4	0-7	1-23	85-100	65-92	40-80	20-55	0-28	NP-9
Lupton-----	0-20	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	20-80	Muck	PT	A-8	0	0	100	100	90-100	40-100	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
					4	10	40	200				
38B: Gogebic, sandy substratum-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Sandy loam, cobbly very fine sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Cobbly sandy loam, very fine sandy loam, fine sandy loam, gravelly silt loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, gravelly fine sandy loam, cobbly loamy very fine sand, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Cobbly sandy loam, gravelly loamy fine sand, fine sandy loam, loamy fine sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
38B: (Gogebic)	49-54	Gravelly loam, cobble sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Fine sandy loam, cobble sandy loam, gravelly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Gravelly sand, sand	SP-SM, SP	A-2-4, A-3	0-15	0-30	85-100	55-95	35-70	0-40	---	NP
38C: Gogebic, sandy substratum-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Sandy loam, fine sandy loam, gravelly silt loam, cobble very fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Sandy loam, cobble very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Silt loam, sandy loam, cobble very fine sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Fine sandy loam, very fine sandy loam, cobble sandy loam, gravelly silt loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
38C: (Gogebic)	In				Pct	Pct					Pct	
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Cobbly sandy loam, loamy fine sand, gravelly loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	49-54	Cobbly sandy loam, gravelly loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Gravelly sandy loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Gravelly sand, sand	SP, SP-SM	A-2-4, A-3	0-15	0-30	85-100	55-95	35-70	0-40	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
38D: Gogebic, sandy substratum-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Sandy loam, cobbly very fine sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Cobbly very fine sandy loam, gravelly fine sandy loam, silt loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Cobbly very fine sandy loam, gravelly fine sandy loam, silt loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, cobbly sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Loamy fine sand, cobbly sandy loam, fine sandy loam, gravelly loamy fine sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
38D: (Gogebic)	In				Pct	Pct					Pct	
	49-54	Gravelly loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Gravelly sandy loam, fine sandy loam, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sand, gravelly sand	SP, SP-SM	A-2-4, A-3	0-15	0-30	85-100	55-95	35-70	0-40	---	NP
39B: Gogebic, sandy substratum-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Cobbly very fine sandy loam, gravelly fine sandy loam, silt loam, sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Cobbly very fine sandy loam, gravelly fine sandy loam, silt loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Cobbly very fine sandy loam, sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Fine sandy loam, very fine sandy loam, cobbly sandy loam, gravelly silt loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
39B: (Gogebic)	In				Pct	Pct					Pct	
	20-33	Sandy loam, loamy sand, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Gravelly loamy fine sand, cobbly sandy loam, loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	49-54	Fine sandy loam, gravelly loam, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Cobbly sandy loam, gravelly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Gravelly sand, sand	SP, SP-SM	A-2-4, A-3	0-15	0-30	85-100	55-95	35-70	0-40	---	NP
39C: Gogebic, sandy substratum-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Cobbly very fine sandy loam, silt loam, gravelly fine sandy loam, sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
39C: (Gogebic)	In				Pct	Pct					Pct	
	8-12	Silt loam, sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Cobbly sandy loam, very fine sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Cobbly sandy loam, loamy fine sand, gravelly loamy fine sand, fine sandy	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	49-54	Gravelly loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Gravelly sandy loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sand, gravelly sand	SP, SP-SM	A-2-4, A-3	0-15	0-30	85-100	55-95	35-70	0-40	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
39D: Gogebic, sandy substratum-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Gravelly fine sandy loam, silt loam, cobbly very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, cobbly sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Gravelly fine sandy loam, cobbly loamy very fine sand, sandy loam, loamy sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Fine sandy loam, gravelly loamy fine sand, loamy fine sand, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
39D: (Gogebic)	49-54	Fine sandy loam, cobbly sandy loam, gravelly loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Fine sandy loam, gravelly sandy loam, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Gravelly sand, sand	SP, SP-SM	A-2-4, A-3	0-15	0-30	85-100	55-95	35-70	0-40	---	NP
41: Lupton-----	0-20	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	20-80	Muck	PT	A-8	0	0	100	100	90-100	40-100	---	NP
Pleine-----	0-9	Very cobbly muck	PT	A-8	0-25	0-50	100	100	100	90-100	---	NP
	9-20	Loam, very fine sandy loam, fine sandy loam, sandy loam	SM, ML, CL- ML, SC-SM	A-4	0-25	6-25	90-100	78-100	50-95	30-60	16-25	1-7
	20-33	Sandy loam, fine sandy loam, loam	CL-ML, ML, SC-SM, SM	A-4	0-25	6-25	90-100	78-100	50-95	30-60	16-25	1-7
	33-80	Gravelly sandy loam, fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-25	6-25	70-95	50-78	30-70	10-50	16-25	1-7
Cathro-----	0-6	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	6-31	Muck	PT	A-8	0	0	100	90-100	90-100	40-100	---	NP
	31-80	Silt loam, silty clay loam, very fine sandy loam, sandy loam, fine sandy loam, loam	CL-ML, ML, SM, SC-SM, CL	A-4, A-6	0	0-10	85-100	65-100	50-85	30-55	16-39	1-18

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
42: Ausable-----	In				Pct	Pct					Pct	
	0-8	Muck	PT	A-8	0	0	100	100	100	100	---	NP
	8-16	Sand, loamy sand, gravelly loamy sand, gravelly sand	SP-SM, SM	A-2-4	0	0	74-100	70-100	0-90	0-40	0-27	NP-10
	16-25	Stratified muck to sand to loamy fine sand	SM, SP-SM	A-2-4	0	0	74-100	70-100	55-100	5-55	0-27	NP-10
	25-36	Loamy sand, gravelly loamy sand, gravelly sand, very gravelly sand	SP-SM, SM	A-2-4	0	0	47-100	45-100	0-90	0-40	0-27	NP-10
	36-45	Very gravelly sand, loamy sand, gravelly loamy sand, gravelly sand	SP-SM, SM	A-2-4	0	0	47-100	45-100	0-90	0-40	0-27	NP-10
	45-80	Loamy sand, gravelly loamy sand, gravelly coarse sand, very gravelly coarse sand	SP-SM, SM	A-1-b, A-2-4	0	0	47-100	45-100	0-75	0-40	0-27	NP-10
Tawas-----	0-22	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	22-42	Sand, loamy fine sand	SM, SP-SM	A-2-4, A-3	0	0-10	85-100	85-100	70-90	10-40	0-21	NP-4
	42-80	Sand, gravelly sand, loamy sand	SP-SM, SM	A-3, A-2-4	0	20-45	50-75	50-75	35-65	10-30	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
43B: Karlin-----	0-1	Highly decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-40	0-20	NP-4
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	---	NP
Pence-----	0-2	Moderately decomposed plant material	PT	A-8	0-5	0-15	100	100	100	100	---	NP
	2-6	Gravelly loamy sand, fine sandy loam, sandy loam	SM, ML, CL- ML, SC-SM	A-4, A-2-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	6-9	Gravelly sandy loam, fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	9-13	Fine sandy loam, gravelly fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	13-16	Coarse sand, gravelly coarse sand, loamy coarse sand, loamy sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	16-31	Gravelly loamy sand, sand, coarse sand, gravelly coarse sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	31-80	Stratified gravelly coarse sand to sand	SP, SP-SM	A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-20	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
43C: Karlin-----	0-1	Highly decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-40	0-20	NP-4
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	---	NP
Pence-----	0-2	Moderately decomposed plant material	PT	A-8	0-5	0-15	100	100	100	100	---	NP
	2-6	Fine sandy loam, gravelly loamy sand, sandy loam	SM, ML, CL- ML, SC-SM	A-4, A-2-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	6-9	Gravelly sandy loam, fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	9-13	Gravelly fine sandy loam, fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	13-16	Coarse sand, loamy sand, loamy coarse sand, gravelly coarse sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	16-31	Sand, gravelly loamy sand, coarse sand, gravelly coarse sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	31-80	Stratified gravelly coarse sand to sand	SP, SP-SM	A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-20	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
43D: Karlin-----	0-1	Highly decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-40	0-20	NP-4
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	---	NP
Pence-----	0-2	Moderately decomposed plant material	PT	A-8	0-5	0-15	100	100	100	100	---	NP
	2-6	Fine sandy loam, gravelly loamy sand, sandy loam	SM, ML, CL- ML, SC-SM	A-4, A-2-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	6-9	Fine sandy loam, gravelly sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	9-13	Fine sandy loam, gravelly fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	13-16	Loamy sand, loamy coarse sand, coarse sand, gravelly coarse sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	16-31	Sand, coarse sand, gravelly loamy sand, gravelly coarse sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	31-80	Stratified gravelly coarse sand to sand	SP, SP-SM	A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-20	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
44B: Karlin-----	In				Pct	Pct					Pct	
	0-1	Highly decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-40	0-20	NP-4
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	---	NP
Keweenaw-----	0-2	Highly decomposed plant material	PT	A-8	0-7	0-10	100	100	100	100	---	NP
	2-4	Gravelly loamy sand, loamy fine sand, loamy sand	SM	A-2-4	0-7	0-10	80-100	75-100	50-80	15-45	0-21	NP-4
	4-6	Loamy fine sand, gravelly loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	50-80	15-45	0-21	NP-4
	6-25	Loamy fine sand, gravelly loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	70-80	15-45	0-21	NP-4
	25-45	Stratified sand to fine sand to loamy fine sand to loamy very fine sand	SM	A-2-4	0-5	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	45-56	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-5	0-7	80-100	75-100	60-95	15-50	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
44B: (Keweenaw)	56-71	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-3	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	71-90	Stratified loamy fine sand to fine sandy loam	ML, SM	A-2-4	0-3	0-5	80-100	75-100	60-80	15-50	0-21	NP-4
Sarona, dense substratum-----	0-3	Sandy loam, loamy sand, fine sandy loam	CL-ML, SM, ML	A-2-4, A-4	0-15	0-15	75-100	55-100	25-90	15-50	0-28	NP-9
	3-6	Fine sandy loam, sandy loam, loamy sand	CL-ML, ML, SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-90	15-50	0-28	NP-9
	6-14	Sandy loam, fine sandy loam	CL-ML, ML, SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-90	15-50	0-28	NP-9
	14-21	Sandy loam, fine sandy loam	CL-ML, ML, SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-85	15-50	0-28	NP-9
	21-28	Sandy loam, fine sandy loam	CL-ML, ML, SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-85	15-50	0-28	NP-9
	28-47	Loamy sand, sandy loam	SM, SC-SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-85	10-45	0-28	NP-9
	47-75	Sandy loam, loamy sand	SM, SC-SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-85	10-45	0-28	NP-9
	75-90	Sandy loam, loamy sand	SM, SC-SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-85	10-45	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
44C: Karlin-----	In				Pct	Pct					Pct	
	0-1	Highly decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-40	0-20	NP-4
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	---	NP
Keweenaw-----	0-2	Highly decomposed plant material	PT	A-8	0-7	0-10	100	100	100	100	---	NP
	2-4	Loamy sand, gravelly loamy sand, loamy fine sand	SM	A-2-4	0-7	0-10	80-100	75-100	50-80	15-45	0-21	NP-4
	4-6	Loamy fine sand, gravelly loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	50-80	15-45	0-21	NP-4
	6-25	Gravelly loamy fine sand, loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	70-80	15-45	0-21	NP-4
	25-45	Stratified sand to fine sand to loamy fine sand to loamy very fine sand	SM	A-2-4	0-5	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	45-56	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-5	0-7	80-100	75-100	60-95	15-50	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
44C: (Keweenaw)	56-71	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-3	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	71-90	Stratified loamy fine sand to fine sandy loam	ML, SM	A-2-4	0-3	0-5	80-100	75-100	60-80	15-50	0-21	NP-4
Sarona, dense substratum-----	0-3	Loamy sand, fine sandy loam, sandy loam	CL-ML, SM, ML	A-2-4, A-4	0-15	0-15	75-100	55-100	25-90	15-50	0-28	NP-9
	3-6	Loamy sand, sandy loam, fine sandy loam	CL-ML, ML, SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-90	15-50	0-28	NP-9
	6-14	Fine sandy loam, sandy loam	CL-ML, ML, SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-90	15-50	0-28	NP-9
	14-21	Sandy loam, fine sandy loam	CL-ML, ML, SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-85	15-50	0-28	NP-9
	21-28	Sandy loam, fine sandy loam	CL-ML, ML, SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-85	15-50	0-28	NP-9
	28-47	Loamy sand, sandy loam	SM, SC-SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-85	10-45	0-28	NP-9
	47-75	Loamy sand, sandy loam	SM, SC-SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-85	10-45	0-28	NP-9
	75-90	Loamy sand, sandy loam	SM, SC-SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-85	10-45	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
44D: Karlin-----	In				Pct	Pct					Pct	
	0-1	Highly decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-40	0-20	NP-4
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	---	NP
Keweenaw-----	0-2	Highly decomposed plant material	PT	A-8	0-7	0-10	100	100	100	100	---	NP
	2-4	Loamy fine sand, gravelly loamy sand, loamy sand	SM	A-2-4	0-7	0-10	80-100	75-100	50-80	15-45	0-21	NP-4
	4-6	Gravelly loamy fine sand, loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	50-80	15-45	0-21	NP-4
	6-25	Gravelly loamy fine sand, loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	70-80	15-45	0-21	NP-4
	25-45	Stratified sand to fine sand to loamy fine sand to loamy very fine sand	SM	A-2-4	0-5	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	45-56	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-5	0-7	80-100	75-100	60-95	15-50	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
44D: (Keweenaw)	56-71	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-3	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	71-90	Stratified loamy fine sand to fine sandy loam	ML, SM	A-2-4	0-3	0-5	80-100	75-100	60-80	15-50	0-21	NP-4
Saronia, dense substratum-----	0-3	Fine sandy loam, loamy sand, sandy loam	CL-ML, SM, ML	A-2-4, A-4	0-15	0-15	75-100	55-100	25-90	15-50	0-28	NP-9
	3-6	Loamy sand, fine sandy loam, sandy loam	CL-ML, ML, SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-90	15-50	0-28	NP-9
	6-14	Sandy loam, fine sandy loam	CL-ML, ML, SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-90	15-50	0-28	NP-9
	14-21	Fine sandy loam, sandy loam	CL-ML, ML, SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-85	15-50	0-28	NP-9
	21-28	Sandy loam, fine sandy loam	CL-ML, ML, SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-85	15-50	0-28	NP-9
	28-47	Sandy loam, loamy sand	SM, SC-SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-85	10-45	0-28	NP-9
	47-75	Sandy loam, loamy sand	SM, SC-SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-85	10-45	0-28	NP-9
	75-90	Sandy loam, loamy sand	SM, SC-SM	A-2-4, A-4	0-15	0-15	75-100	55-100	25-85	10-45	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
46C: Amasa-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-4	Cobbly silt loam, cobbly fine sandy loam, gravelly very fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-3	0-50	80-100	55-100	40-90	20-80	0-30	NP-11
	4-7	Silt loam, gravelly fine sandy loam, gravelly very fine sandy loam, gravelly loam	CL-ML, ML, SC-SM, SM	A-4	0-3	0-50	80-100	55-100	40-90	20-80	0-30	NP-11
	7-23	Gravelly loam, gravelly silt loam, gravelly fine sandy loam, very fine sandy loam	CL-ML, ML, SC-SM, SM	A-4, A-2-4	0-3	0-50	80-100	55-100	40-90	20-70	0-25	NP-7
	23-28	Fine sandy loam, gravelly silt loam, very fine sandy loam, gravelly loam	CL-ML, ML, SC-SM, SM	A-2-4, A-4	0-3	0-50	80-100	55-100	40-90	20-70	0-25	NP-7
	28-41	Sand, gravelly coarse sand	SP-SM, SP, SM, GM	A-2-4, A-1-b, A-1-a	0-8	0-50	50-100	25-100	0-75	0-25	0-16	NP-1
	41-80	Gravelly sand, very gravelly sand, gravelly coarse sand	GM, SP-SM	A-1-b, A-2-4, A-1-a	0-8	0-50	50-100	25-100	0-75	0-25	0-16	NP-1

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
					4	10	40	200				
	In				Pct	Pct					Pct	
46C: Karlin-----	0-1	Highly decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-40	0-20	NP-4
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	---	NP
46D: Amasa-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-4	Cobbly silt loam, cobbly fine sandy loam, gravelly very fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-3	0-50	80-100	55-100	40-90	20-80	0-30	NP-11
	4-7	Gravelly loam, gravelly fine sandy loam, gravelly very fine sandy loam, silt loam	CL-ML, ML, SC-SM, SM	A-4	0-3	0-50	80-100	55-100	40-90	20-80	0-30	NP-11
	7-23	Very fine sandy loam, gravelly fine sandy loam, gravelly silt loam, gravelly loam	CL-ML, ML, SC-SM, SM	A-4, A-2-4	0-3	0-50	80-100	55-100	40-90	20-70	0-25	NP-7
	23-28	Fine sandy loam, gravelly loam, gravelly silt loam, very fine sandy loam	CL-ML, ML, SC-SM, SM	A-2-4, A-4	0-3	0-50	80-100	55-100	40-90	20-70	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
46D: (Amasa)	28-41	Sand, gravelly coarse sand	SP-SM, SP, SM, GM	A-2-4, A-1-b, A-1-a	0-8	0-50	50-100	25-100	0-75	0-25	0-16	NP-1
	41-80	Very gravelly sand, gravelly sand, gravelly coarse sand	GM, SP-SM	A-1-b, A-2-4, A-1-a	0-8	0-50	50-100	25-100	0-75	0-25	0-16	NP-1
Karlin-----	0-1	Highly decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-40	0-20	NP-4
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	---	NP
46E: Amasa-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-4	Cobbly fine sandy loam, cobbly silt loam, gravelly very fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-3	0-50	80-100	55-100	40-90	20-80	0-30	NP-11
	4-7	Silt loam, gravelly loam, gravelly very fine sandy loam, gravelly fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-3	0-50	80-100	55-100	40-90	20-80	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
					4	10	40	200				
46E: (Amasa)	In				Pct	Pct					Pct	
	7-23	Gravelly loam, gravelly silt loam, very fine sandy loam, gravelly fine sandy loam	CL-ML, ML, SC-SM, SM	A-4, A-2-4	0-3	0-50	80-100	55-100	40-90	20-70	0-25	NP-7
	23-28	Very fine sandy loam, fine sandy loam, gravelly silt loam, gravelly loam	CL-ML, ML, SC-SM, SM	A-2-4, A-4	0-3	0-50	80-100	55-100	40-90	20-70	0-25	NP-7
	28-41	Gravelly coarse sand, sand	SP-SM, SP, SM, GM	A-2-4, A-1-b, A-1-a	0-8	0-50	50-100	25-100	0-75	0-25	0-16	NP-1
	41-80	Gravelly coarse sand, gravelly sand, very gravelly sand	GM, SP-SM	A-1-b, A-2-4, A-1-a	0-8	0-50	50-100	25-100	0-75	0-25	0-16	NP-1
Karlin-----	0-1	Highly decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-40	0-20	NP-4
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
							4	10	40	200		
	In				Pct	Pct					Pct	
46F: Amasa-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-4	Gravelly very fine sandy loam, cobbly fine sandy loam, cobbly silt loam	ML, SM, CL- ML, SC-SM	A-4	0-3	0-50	80-100	55-100	40-90	20-80	0-30	NP-11
	4-7	Gravelly loam, gravelly fine sandy loam, gravelly very fine sandy loam, silt loam	CL-ML	A-4	0-3	0-50	58-100	55-100	50-100	40-90	20-30	5-12
	7-23	Very fine sandy loam, gravelly loam, gravelly silt loam, gravelly fine sandy loam	CL-ML	A-4	0-3	0-50	53-100	50-100	45-100	15-80	22-33	6-14
	23-28	Gravelly very fine sandy loam, gravelly loam, gravelly silt loam, fine sandy loam	SC-SM	A-4	0-3	0-50	58-100	55-100	30-90	10-70	22-33	6-14
	28-41	Gravelly coarse sand, sand	SP-SM, SP, SM, GM	A-2-4, A-1-b, A-1-a	0-8	0-50	27-100	25-100	0-90	0-40	12-21	NP-5
	41-80	Gravelly coarse sand, gravelly sand, very gravelly sand	GM, SP-SM	A-1-b, A-2-4, A-1-a	0-8	0-50	26-100	25-100	0-90	0-40	12-21	NP-5

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
46F: Karlin-----	In				Pct	Pct					Pct	
	0-1	Highly decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-20	NP-10
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-40	NP-12
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-55	0-23	NP-6
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	0-19	NP-2
47B: Karlin, very deep water table-----	0-1	Highly decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-40	0-20	NP-4
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
47B: Noseum-----	0-1	Highly decomposed plant material	PT	A-8	0	0-7	100	100	100	100	---	NP
	1-4	Fine sandy loam, sandy loam	SC-SM, ML, SM	A-4	0	0-7	95-100	90-100	55-85	10-70	0-25	NP-7
	4-6	Sandy loam, fine sandy loam	SC-SM, ML, SM	A-4	0	0-7	95-100	90-100	55-85	10-70	0-25	NP-7
	6-14	Fine sandy loam, sandy loam	SC-SM, ML, SM	A-4	0	0-7	95-100	90-100	55-85	10-70	0-25	NP-7
	14-24	Loamy sand, loamy fine sand, sand	SP-SM, SM	A-4, A-2-4	0	0-7	95-100	90-100	45-75	10-50	0-21	NP-4
	24-37	Fine sand, sand	SP, SM, SP-SM	A-2-4, A-3	0	0-7	95-100	90-100	45-75	0-35	---	NP
	37-63	Sand, fine sand	SM, SP, SP-SM	A-2-4, A-3	0	0-7	95-100	90-100	45-75	0-35	---	NP
	63-80	Sand, fine sand	SP, SM, SP-SM	A-2-4, A-3	0	0-7	95-100	90-100	45-75	0-35	---	NP
Gay-----	0-4	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	4-7	Loamy sand, cobbly sandy loam, mucky sandy loam, fine sandy loam	SM	A-2-4, A-4	0-24	0-15	90-100	75-100	35-80	10-50	0-21	NP-4
	7-11	Sandy loam, cobbly sandy loam, loamy sand	SM	A-2-4, A-4	0-24	0-15	90-100	75-100	35-75	10-40	0-21	NP-4
	11-16	Sandy loam, fine sandy loam	SM, SC-SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-28	2-9
	16-30	Fine sandy loam, sandy loam	SM, SC-SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-25	2-7
	30-80	Sandy loam, fine sandy loam	SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-23	2-6

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
48C: Karlin-----	0-1	Highly decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-40	0-20	NP-4
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	---	NP
Michigamme-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-2	Cobbly silt loam, cobbly sandy loam, cobbly fine sandy loam, loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	2-4	Loam, cobbly sandy loam, cobbly fine sandy loam, cobbly silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	4-7	Cobbly sandy loam, silt loam, cobbly fine sandy loam, loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	7-14	Cobbly sandy loam, cobbly fine sandy loam, silt loam, loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
48C: (Michigamme)	14-20	Cobbly fine sandy loam, gravelly sandy loam, loam, silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	20-24	Very cobbly silt loam, cobbly sandy loam, loam, cobbly fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	24-31	Very cobbly fine sandy loam, gravelly loamy sand, cobbly loamy sand, gravelly sandy loam, cobbly sandy loam	CL-ML, ML, SC-SM, SM	A-4, A-2-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	31-80	Bedrock	---	---	---	---	---	---	---	---	---	---
48F: Karlin-----	0-1	Highly decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-20	NP-10
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-40	NP-12
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-55	0-23	NP-6
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	0-19	NP-2

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
48F: Michigamme-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-2	Cobbly fine sandy loam, loam, cobbly sandy loam, cobbly silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	2-4	Cobbly silt loam, cobbly sandy loam, cobbly fine sandy loam, loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	4-7	Loam, silt loam, cobbly sandy loam, cobbly fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	7-14	Cobbly fine sandy loam, silt loam, loam, cobbly sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	14-20	Gravelly sandy loam, cobbly fine sandy loam, loam, silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	20-24	Cobbly sandy loam, cobbly fine sandy loam, very cobbly silt loam, loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	24-31	Cobbly loamy sand, gravelly sandy loam, gravelly loamy sand, very cobbly fine sandy loam, cobbly sandy loam	CL-ML, ML, SC-SM, SM	A-4, A-2-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	31-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
49B: Pelissier-----	0-2	Slightly decomposed plant material	PT	A-8	0-3	0	100	100	100	90-100	---	---
	2-6	Gravelly loamy sand, gravelly sandy loam, gravelly sand	SM, SP-SM	A-2-4	0-3	0-68	70-99	50-98	30-55	10-35	0-19	NP-3
	6-10	Gravelly sandy loam, cobbly sandy loam, gravelly sand	SP-SM, SM	A-2-4, A-3	0-3	0-68	70-95	50-90	30-55	10-35	0-19	NP-3
	10-21	Very gravelly loamy sand, very cobbly loamy coarse sand, gravelly loamy sand	SP-SM, SP, GP-GM	A-1-b	0-3	0-68	30-95	20-90	10-40	1-10	---	NP
	21-36	Extremely gravelly coarse sand, very cobbly sand, very gravelly coarse sand	GW, GW-GM, SW	A-1-a, A-1-b	0-3	0-82	30-95	20-75	10-40	1-10	---	NP
	36-80	Extremely gravelly coarse sand, extremely cobbly coarse sand, extremely gravelly sand	GW, GW-GM, SW	A-1-a, A-1-b	0-3	0-82	30-95	20-75	10-40	1-10	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
49B: Sarwet-----	In				Pct	Pct					Pct	
	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-3	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	3-7	Loamy sand, sandy loam, fine sandy loam	SC-SM, ML, CL-ML, SM	A-2-4, A-4	0-8	0-22	75-100	55-98	30-75	15-50	0-30	NP-11
	7-14	Fine sandy loam, gravelly fine sandy loam, cobbly fine sandy loam, sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-8	0-22	75-100	55-98	30-75	15-50	0-30	NP-11
	14-22	Fine sandy loam, sandy loam, cobbly fine sandy loam, gravelly fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-8	0-22	75-100	55-98	30-75	15-50	0-30	NP-11
	22-28	Gravelly fine sandy loam, sandy loam, fine sandy loam, cobbly fine sandy loam, loamy sand	SC-SM, SM	A-4, A-2-4	0-8	0-22	75-100	55-98	30-75	15-40	0-30	NP-11
	28-38	Gravelly fine sandy loam, fine sandy loam, cobbly fine sandy loam, sandy loam, loamy sand	SC-SM, SM	A-2-4, A-4	0-8	0-22	75-100	55-98	30-75	15-45	0-30	NP-11
	38-47	Cobbly fine sand, sandy loam, loamy sand, gravelly fine sand, fine sand	SP-SM, SC-SM, SM	A-2-4	0-8	0-22	75-100	55-98	30-75	5-30	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
49B: (Sarwet)	In				Pct	Pct					Pct	
	47-50	Loamy sand, sandy clay loam, sandy loam	CL-ML, ML, SC-SM, SM, SC	A-4, A-6	0-8	0-22	75-100	55-98	30-75	15-55	0-35	NP-15
	50-80	Loamy sand, sandy loam	SP-SM, SC-SM, SM	A-2-4, A-4	0-8	0-22	75-100	55-98	30-75	10-45	0-30	NP-11
49C: Pelissier-----	0-2	Slightly decomposed plant material	PT	A-8	0-3	0	100	100	100	90-100	---	---
	2-6	Gravelly sand, gravelly loamy sand, gravelly sandy loam	SM, SP-SM	A-2-4	0-3	0-68	70-99	50-98	30-55	10-35	0-19	NP-3
	6-10	Gravelly sand, cobbly sandy loam, gravelly sandy loam	SP-SM, SM	A-2-4, A-3	0-3	0-68	70-95	50-90	30-55	10-35	0-19	NP-3
	10-21	Gravelly loamy sand, very cobbly loamy coarse sand, very gravelly loamy sand	SP-SM, SP, GP-GM	A-1-b	0-3	0-68	30-95	20-90	10-40	1-10	---	NP
	21-36	Very gravelly coarse sand, extremely gravelly coarse sand, very cobbly sand	GW, GW-GM, SW	A-1-a, A-1-b	0-3	0-82	30-95	20-75	10-40	1-10	---	NP
	36-80	Extremely gravelly coarse sand, extremely gravelly sand, extremely cobbly coarse sand	GW, GW-GM, SW	A-1-a, A-1-b	0-3	0-82	30-95	20-75	10-40	1-10	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
49C: Sarwet-----	In				Pct	Pct					Pct	
	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-3	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	3-7	Fine sandy loam, loamy sand, sandy loam	SC-SM, ML, CL-ML, SM	A-2-4, A-4	0-8	0-22	75-100	55-98	30-75	15-50	0-30	NP-11
	7-14	Gravelly fine sandy loam, sandy loam, cobbly fine sandy loam, fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-8	0-22	75-100	55-98	30-75	15-50	0-30	NP-11
	14-22	Fine sandy loam, gravelly fine sandy loam, cobbly fine sandy loam, sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-8	0-22	75-100	55-98	30-75	15-50	0-30	NP-11
	22-28	Loamy sand, sandy loam, cobbly fine sandy loam, gravelly fine sandy loam, fine sandy loam	SC-SM, SM	A-4, A-2-4	0-8	0-22	75-100	55-98	30-75	15-40	0-30	NP-11
	28-38	Fine sandy loam, gravelly fine sandy loam, cobbly fine sandy loam, sandy loam, loamy sand	SC-SM, SM	A-2-4, A-4	0-8	0-22	75-100	55-98	30-75	15-45	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
49C: (Sarwet)	38-47	Sandy loam, loamy sand, fine sand, cobbly fine sand, gravelly fine sand	SP-SM, SC-SM, SM	A-2-4	0-8	0-22	75-100	55-98	30-75	5-30	0-30	NP-11
	47-50	Sandy clay loam, sandy loam, loamy sand	CL-ML, ML, SC-SM, SM, SC	A-4, A-6	0-8	0-22	75-100	55-98	30-75	15-55	0-35	NP-15
	50-80	Loamy sand, sandy loam	SP-SM, SC-SM, SM	A-2-4, A-4	0-8	0-22	75-100	55-98	30-75	10-45	0-30	NP-11
49D: Pelissier-----	0-2	Slightly decomposed plant material	PT	A-8	0-3	0	100	100	100	90-100	---	---
	2-6	Gravelly sand, gravelly sandy loam, gravelly loamy sand	SM, SP-SM	A-2-4	0-3	0-68	70-99	50-98	30-55	10-35	0-19	NP-3
	6-10	Gravelly sand, cobbly sandy loam, gravelly sandy loam	SP-SM, SM	A-2-4, A-3	0-3	0-68	70-95	50-90	30-55	10-35	0-19	NP-3
	10-21	Very gravelly loamy sand, gravelly loamy sand, very cobbly loamy coarse sand	SP-SM, SP, GP-GM	A-1-b	0-3	0-68	30-95	20-90	10-40	1-10	---	NP
	21-36	Very gravelly coarse sand, very cobbly sand, extremely gravelly coarse sand	GW, GW-GM, SW	A-1-a, A-1-b	0-3	0-82	30-95	20-75	10-40	1-10	---	NP
	36-80	Extremely gravelly coarse sand, extremely gravelly sand, extremely cobbly coarse sand	GW, GW-GM, SW	A-1-a, A-1-b	0-3	0-82	30-95	20-75	10-40	1-10	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
52B: Pence-----	0-2	Moderately decomposed plant material	PT	A-8	0-5	0-15	100	100	100	100	---	NP
	2-6	Fine sandy loam, gravelly loamy sand, sandy loam	SM, ML, CL- ML, SC-SM	A-4, A-2-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	6-9	Fine sandy loam, gravelly sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	9-13	Fine sandy loam, gravelly fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	13-16	Coarse sand, gravelly coarse sand, loamy sand, loamy coarse sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	16-31	Gravelly loamy sand, sand, gravelly coarse sand, coarse sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	31-80	Stratified gravelly coarse sand to sand	SP, SP-SM	A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-20	---	NP
	Vilas-----	0-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---
	2-4	Sand, loamy sand	SM	A-2-4	0	0	95-100	85-100	40-90	10-50	0-25	NP-7
	4-7	Sand, loamy sand	SM	A-2-4	0	0	95-100	85-100	40-90	10-50	0-25	NP-7
	7-17	Sand, loamy sand	SM	A-2-4	0	0	95-100	85-100	40-90	10-50	0-25	NP-7
	17-22	Coarse sand, sand	SM	A-1-b, A-3	0	0	95-100	85-100	30-90	0-40	0-21	NP-4
	22-35	Sand	SM	A-3	0	0	95-100	85-100	30-90	0-40	0-21	NP-4
	35-80	Coarse sand, sand	SM	A-3, A-1-b	0	0	95-100	85-100	30-90	0-40	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
52C: Pence-----	0-2	Moderately decomposed plant material	PT	A-8	0-5	0-15	100	100	100	100	---	NP
	2-6	Gravelly loamy sand, sandy loam, fine sandy loam	SM, ML, CL- ML, SC-SM	A-4, A-2-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	6-9	Fine sandy loam, gravelly sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	9-13	Fine sandy loam, gravelly fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	13-16	Loamy coarse sand, loamy sand, gravelly coarse sand, coarse sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	16-31	Gravelly coarse sand, gravelly loamy sand, coarse sand, sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	31-80	Stratified gravelly coarse sand to sand	SP, SP-SM	A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-20	---	NP
Vilas-----	0-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-4	Sand, loamy sand	SM	A-2-4	0	0	95-100	85-100	40-90	10-50	0-25	NP-7
	4-7	Loamy sand, sand	SM	A-2-4	0	0	95-100	85-100	40-90	10-50	0-25	NP-7
	7-17	Loamy sand, sand	SM	A-2-4	0	0	95-100	85-100	40-90	10-50	0-25	NP-7
	17-22	Coarse sand, sand	SM	A-1-b, A-3	0	0	95-100	85-100	30-90	0-40	0-21	NP-4
	22-35	Sand	SM	A-3	0	0	95-100	85-100	30-90	0-40	0-21	NP-4
	35-80	Sand, coarse sand	SM	A-3, A-1-b	0	0	95-100	85-100	30-90	0-40	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
53B: Manitowish-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-4	Sandy loam, gravelly fine sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	4-5	Gravelly fine sandy loam, sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	5-11	Gravelly fine sandy loam, sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	11-22	Gravelly fine sandy loam, sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	22-40	Coarse sand, loamy coarse sand, gravelly loamy sand	SM	A-1-b, A-2-4	0	0-15	75-100	50-100	5-60	5-25	0-26	NP-9
	40-80	Gravelly sand, coarse sand	SP-SM, SW-SM	A-1-b, A-3	0	0-15	75-100	50-100	0-60	0-25	0-20	NP-4
Croswell-----	0-3	Cobbly loamy sand, sand	SP-SM, SP, SM	A-2-4, A-3	0	0-45	90-100	75-100	40-80	0-25	---	NP
	3-7	Cobbly loamy sand, sand	SP-SM, SP, SM	A-2-4, A-3	0	0-45	90-100	75-100	40-80	0-25	---	NP
	7-34	Sand	SP, SP-SM	A-3, A-2-4	0	0-45	90-100	75-100	40-80	0-25	---	NP
	34-80	Sand	SP, SP-SM	A-3, A-2-4	0	0-45	90-100	75-100	40-80	0-25	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
57B: Karlin-----	0-1	Highly decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-20	NP-10
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-40	NP-12
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-55	0-23	NP-6
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	0-19	NP-2
Manitowish-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-4	Sandy loam, gravelly fine sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	4-5	Sandy loam, gravelly fine sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	5-11	Gravelly fine sandy loam, sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	11-22	Sandy loam, gravelly fine sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	22-40	Coarse sand, loamy coarse sand, gravelly loamy sand	SM	A-1-b, A-2-4	0	0-15	75-100	50-100	5-60	5-25	0-26	NP-9
	40-80	Coarse sand, gravelly sand	SP-SM, SW-SM	A-1-b, A-3	0	0-15	75-100	50-100	0-60	0-25	0-20	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
57C: Karlin-----	0-1	Highly decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-20	NP-10
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-40	NP-12
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-55	0-23	NP-6
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	0-19	NP-2
Manitowish-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-4	Gravelly fine sandy loam, sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	4-5	Gravelly fine sandy loam, sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	5-11	Gravelly fine sandy loam, sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	11-22	Gravelly fine sandy loam, sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	22-40	Coarse sand, loamy coarse sand, gravelly loamy sand	SM	A-1-b, A-2-4	0	0-15	75-100	50-100	5-60	5-25	0-26	NP-9
	40-80	Coarse sand, gravelly sand	SP-SM, SW-SM	A-1-b, A-3	0	0-15	75-100	50-100	0-60	0-25	0-20	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
58B: Vilas, very deep water table----	0-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-4	Sand, loamy sand	SM	A-2-4	0	0	95-100	85-100	40-90	10-50	0-25	NP-7
	4-7	Loamy sand, sand	SM	A-2-4	0	0	95-100	85-100	40-90	10-50	0-25	NP-7
	7-17	Loamy sand, sand	SM	A-2-4	0	0	95-100	85-100	40-90	10-50	0-25	NP-7
	17-22	Coarse sand, sand	SM	A-1-b, A-3	0	0	95-100	85-100	30-90	0-40	0-21	NP-4
	22-35	Sand	SM	A-3	0	0	95-100	85-100	30-90	0-40	0-21	NP-4
	35-80	Coarse sand, sand	SM	A-3, A-1-b	0	0	95-100	85-100	30-90	0-40	0-21	NP-4
Croswell-----	0-3	Cobbly loamy sand, sand	SP-SM, SP, SM	A-2-4, A-3	0	0-45	75-100	75-100	55-90	0-50	---	NP
	3-7	Cobbly loamy sand, sand	SP-SM, SP, SM	A-2-4, A-3	0	0-45	75-100	75-100	55-90	0-50	---	NP
	7-34	Sand	SP, SP-SM	A-3, A-2-4	0	0-45	75-100	75-100	55-90	0-50	---	NP
	34-80	Sand	SP, SP-SM	A-3, A-2-4	0	0-45	75-100	75-100	55-90	0-50	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
58B: Pence, very deep water table----	0-2	Moderately decomposed plant material	PT	A-8	0-5	0-15	100	100	100	100	---	NP
	2-6	Fine sandy loam, sandy loam, gravelly loamy sand	SM, ML, CL- ML, SC-SM	A-4, A-2-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	6-9	Fine sandy loam, gravelly sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	9-13	Gravelly fine sandy loam, fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	13-16	Gravelly coarse sand, coarse sand, loamy sand, loamy coarse sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	16-31	Gravelly coarse sand, gravelly loamy sand, coarse sand, sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	31-80	Stratified gravelly coarse sand to sand	SP, SP-SM	A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-20	---	NP
61: Tawas-----	0-22	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	22-42	Loamy fine sand, sand	SM, SP-SM	A-2-4, A-3	0	0-10	85-100	85-100	70-90	10-40	0-21	NP-4
	42-80	Loamy sand, sand, gravelly sand	SP-SM, SM	A-3, A-2-4	0	20-45	50-75	50-75	35-65	10-30	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
61: Kinross-----	0-5	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	5-10	Loamy fine sand, fine sand, sand	SP-SM, SP	A-2-4, A-3	0	0	95-100	90-100	50-80	0-40	---	NP
	10-12	Loamy sand, fine sand, sand	SP-SM, SP	A-2-4, A-3	0	0	95-100	90-100	50-80	0-40	---	NP
	12-30	Loamy sand, fine sand, sand	SP, SP-SM	A-3, A-2-4	0	0	95-100	90-100	50-80	0-30	---	NP
	30-41	Fine sand, sand	SP-SM, SP	A-3	0	0	95-100	90-100	50-80	0-30	---	NP
	41-80	Sand, fine sand	SP, SP-SM	A-3	0	0	95-100	90-100	50-80	0-30	---	NP
62B: Pelkie-----	0-8	Loamy very fine sand, fine sand, loamy fine sand, fine sandy loam	SM	A-4, A-2-4	0	0	100	100	60-100	20-65	---	NP
	8-32	Fine sand, loamy fine sand, sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	75-100	0-50	---	NP
	32-80	Fine sand, loamy fine sand, sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	0-90	0-40	---	NP
83: Bowstring-----	0-13	Muck	PT	A-8	0	0	100	100	100	100	---	NP
	13-15	Stratified muck to mucky silt loam, loamy sand, sand	CL-ML, ML, SP-SM, SM	A-4, A-2-4	0	0	90-100	70-100	35-100	10-100	0-36	NP-15
	15-32	Muck	PT	A-8	0	0	100	100	100	100	---	NP
	32-36	Mucky peat	PT	A-8	0	0	100	100	100	100	---	NP
	36-42	Loamy sand, fine sand, fine sandy loam, sand	SC-SM, SP-SM, ML, SM	A-4, A-2-4	0	0	90-100	70-100	40-90	5-70	0-30	NP-11
	42-80	Stratified fine sand to loamy sand, stratified gravelly coarse sand to sand	SP-SM, SM	A-2-4	0	0	90-100	70-100	10-75	5-40	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
141D: Oldman-----	0-1	Gravelly moderately decomposed plant material	PT	A-8	0-50	0-55	100	100	100	100	---	NP
	1-3	Very gravelly silt loam, very cobbly fine sandy loam, very cobbly silt loam, very cobbly loam, gravelly silt loam, gravelly fine sandy loam	ML, GM, GC- GM, CL-ML	A-4, A-1-a	0-50	0-55	50-95	30-90	20-75	10-60	0-26	NP-8
	3-23	Extremely cobbly loam, gravelly silt loam, extremely gravelly silt loam, cobbly fine sandy loam, very gravelly sandy loam, very cobbly sandy loam	CL-ML, GC-GM, GM, ML	A-4, A-1-a	0-50	0-55	50-95	30-90	20-75	10-60	0-26	NP-8
	23-28	Very gravelly sandy loam, gravelly loam, extremely gravelly fine sandy loam, cobbly loam, very cobbly fine sandy loam, extremely cobbly loamy fine sand	ML, SM, GM	A-1-a, A-4, A-2-4	0-50	0-55	50-90	30-85	20-75	10-60	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
141D: (Oldman)	In				Pct	Pct					Pct	
	28-43	Extremely stony loamy fine sand, extremely cobbley fine sandy loam, extremely bouldery loamy fine sand, extremely bouldery fine sandy loam, very gravelly loam, extremely stony fine sandy loam	ML, SM, GM	A-4, A-1-a, A-2-4	0-50	0-55	50-90	30-85	20-75	10-60	0-21	NP-4
	43-58	Very bouldery fine sandy loam, extremely bouldery loamy sand, very cobbley loamy fine sand, very cobbley fine sandy loam, very gravelly fine sandy loam, gravelly fine sandy loam	SM, ML, GM	A-4, A-1-a, A-2-4	0-50	0-55	50-90	30-85	20-75	10-60	0-21	NP-4
	58-80	Gravelly loamy sand, very gravelly fine sandy loam, very gravelly loamy fine sand, gravelly sand, fine sandy loam, loam	GM, ML, SM	A-1-a, A-4, A-2-4	0-50	0-55	50-90	30-85	20-75	10-60	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
141E: Oldman-----	0-1	Gravelly moderately decomposed plant material	PT	A-8	0-50	0-55	100	100	100	100	---	NP
	1-3	Gravelly fine sandy loam, very gravelly silt loam, gravelly silt loam, very cobbly silt loam, very cobbly loam, very cobbly fine sandy loam	ML, GM, GC- GM, CL-ML	A-4, A-1-a	0-50	0-55	50-95	30-90	20-75	10-60	0-26	NP-8
	3-23	Gravelly silt loam, extremely cobbly loam, extremely gravelly silt loam, very gravelly sandy loam, very cobbly sandy loam, cobbly fine sandy loam	CL-ML, GC-GM, GM, ML	A-4, A-1-a	0-50	0-55	50-95	30-90	20-75	10-60	0-26	NP-8
	23-28	Extremely gravelly fine sandy loam, cobbly loam, very cobbly fine sandy loam, extremely cobbly loamy fine sand, gravelly loam, very gravelly sandy loam	ML, SM, GM	A-1-a, A-4, A-2-4	0-50	0-55	50-90	30-85	20-75	10-60	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
141E: (Oldman)	28-43	Extremely cobbley fine sandy loam, very gravelly loam, extremely stony fine sandy loam, extremely stony loamy fine sand, extremely bouldery fine sandy loam, extremely bouldery loamy fine sand	ML, SM, GM	A-4, A-1-a, A-2-4	0-50	0-55	50-90	30-85	20-75	10-60	0-21	NP-4
	43-58	Very gravelly fine sandy loam, very cobbley fine sandy loam, very cobbley loamy fine sand, very bouldery fine sandy loam, extremely bouldery loamy sand, gravelly fine sandy loam	SM, ML, GM	A-4, A-1-a, A-2-4	0-50	0-55	50-90	30-85	20-75	10-60	0-21	NP-4
	58-80	Very gravelly fine sandy loam, gravelly sand, very gravelly loamy fine sand, loam, fine sandy loam, gravelly loamy sand	GM, ML, SM	A-1-a, A-4, A-2-4	0-50	0-55	50-90	30-85	20-75	10-60	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
							4	10	40	200		
	In				Pct	Pct					Pct	
141F: Porkies-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-5	100	100	100	100	---	NP
	1-3	Very cobbly fine sandy loam, very gravelly loam, very stony silt loam, very gravelly fine sandy loam	CL, ML, CL- ML, SM	A-4, A-6, A- 1-a	0-55	0-44	55-95	25-90	15-80	10-60	0-34	NP-14
	3-4	Very gravelly fine sandy loam, very gravelly loam, very cobbly fine sandy loam, very gravelly silt loam	ML, SM, CL-ML	A-4, A-1-a	0-55	0-44	55-95	25-90	15-80	5-60	0-21	NP-4
	4-7	Very cobbly fine sandy loam, very gravelly loam, very gravelly sandy loam, very gravelly fine sandy loam	ML, SM, CL-ML	A-4, A-1-a	0-55	0-44	55-95	25-90	15-80	5-60	0-21	NP-4
	7-31	Very gravelly sandy loam, very cobbly sandy loam, very cobbly fine sandy loam, very gravelly fine sandy loam	ML, SM	A-4, A-1-a	0-55	0-44	55-95	25-90	15-80	5-60	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
141F: (Porkies)	In				Pct	Pct					Pct	
	31-40	Very gravelly fine sandy loam, very bouldery sandy loam, very cobbly fine sandy loam, very gravelly sandy loam	ML, SM	A-4, A-1-a	0-55	0-44	55-95	25-90	15-80	5-60	0-21	NP-4
	40-50	Very gravelly fine sandy loam, very cobbly fine sandy loam, very gravelly sandy loam, very gravelly silt loam, very bouldery sandy loam	ML, SM	A-4, A-1-a	0-55	0-44	55-95	25-90	15-80	5-60	0-21	NP-4
	50-61	Very cobbly loamy sand, very gravelly loamy fine sand, extremely gravelly loamy fine sand, bouldery fine sandy loam, very gravelly fine sandy loam	GM, SM	A-2-4, A-4, A-1-a	0-55	0-50	40-80	30-75	10-70	5-45	0-21	NP-4
	61-90	Extremely gravelly loamy coarse sand, very gravelly fine sandy loam, very cobbly fine sandy loam, very gravelly loamy coarse sand, very gravelly coarse sand, extremely gravelly coarse sandy loam	GM, SM	A-2-4, A-4, A-1-a	0-55	0-50	40-80	30-50	15-40	0-40	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
214B: Amnicon-----	0-2	Silty clay, silty clay loam, silt loam	CL, CH	A-7-6, A-6	0	0-3	95-100	90-100	85-100	55-95	35-66	15-39
	2-5	Silty clay, silty clay loam, silt loam	CL, CH	A-6, A-7-6	0	0-3	95-100	90-100	85-100	55-95	35-66	15-39
	5-10	Clay, silty clay, silty clay loam	CH, CL	A-7-6, A-6	0	0-3	95-100	90-100	85-100	55-95	35-66	15-39
	10-16	Clay	CH	A-7-6	0	0-3	95-100	90-100	85-100	75-95	44-75	22-46
	16-24	Clay	CH	A-7-6	0	0-3	95-100	90-100	85-100	75-100	66-89	39-57
	24-43	Clay	CH	A-7-6	0	0-3	95-100	90-100	85-100	75-100	66-89	39-57
	43-80	Clay	CH	A-7-6	0	0-3	95-100	90-100	85-100	75-100	66-89	39-57
Bergland-----	0-1	Mucky peat	PT	A-8	0	0	100	100	100	90-100	---	NP
	1-3	Mucky clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	61-93	35-60
	3-8	Clay, silty clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	61-93	35-60
	8-13	Clay, silty clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	61-93	35-60
	13-25	Silty clay, clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	61-93	35-60
	25-35	Clay, silty clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	57-93	32-60
	35-48	Silty clay, clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	57-93	32-60
	48-80	Clay, silty clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	57-93	32-60
216B: Amnicon-----	0-2	Silt loam, silty clay loam, silty clay	CL, CH	A-7-6, A-6	0	0-3	95-100	90-100	85-100	55-95	35-66	15-39
	2-5	Silt loam, silty clay loam, silty clay	CL, CH	A-6, A-7-6	0	0-3	95-100	90-100	85-100	55-95	35-66	15-39
	5-10	Silty clay loam, silty clay, clay	CH, CL	A-7-6, A-6	0	0-3	95-100	90-100	85-100	55-95	35-66	15-39
	10-16	Clay	CH	A-7-6	0	0-3	95-100	90-100	85-100	75-95	44-75	22-46
	16-24	Clay	CH	A-7-6	0	0-3	95-100	90-100	85-100	75-100	66-89	39-57
	24-43	Clay	CH	A-7-6	0	0-3	95-100	90-100	85-100	75-100	66-89	39-57
	43-80	Clay	CH	A-7-6	0	0-3	95-100	90-100	85-100	75-100	66-89	39-57

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
217A:												
Cuttre-----	0-3	Silt loam	CH	A-6, A-7	0	0-3	95-100	90-100	60-100	55-100	35-66	15-39
	3-6	Silty clay, clay loam, silty clay loam, clay	CH, CL	A-7, A-6	0	0-3	95-100	90-100	85-100	55-95	35-66	15-39
	6-12	Silty clay loam, clay, silty clay	CL, CH	A-7-6	0	0-3	95-100	90-100	85-100	75-95	43-75	21-46
	12-25	Clay	CH	A-7-6	0	0	100	100	80-100	70-95	66-88	39-56
	25-41	Clay	CH	A-7-6	0	0	100	100	80-100	70-95	66-88	39-56
	41-80	Clay	CH	A-7-6	0	0	100	100	80-100	70-95	66-84	39-53
218:												
Bergland-----	0-1	Mucky peat	PT	A-8	0	0	100	100	100	90-100	---	NP
	1-3	Mucky clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	61-93	35-60
	3-8	Clay, silty clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	61-93	35-60
	8-13	Clay, silty clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	61-93	35-60
	13-25	Clay, silty clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	61-93	35-60
	25-35	Silty clay, clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	57-93	32-60
	35-48	Clay, silty clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	57-93	32-60
	48-80	Silty clay, clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	57-93	32-60
219B:												
Payseor-----	0-7	Clay, silty clay loam	CH, CL	A-7-6	0	0	99-100	97-100	90-100	80-98	44-88	22-56
	7-10	Clay, silty clay loam	CL, CH	A-7-6	0	0	99-100	97-100	90-100	80-98	44-88	22-56
	10-18	Clay	CH	A-7-6	0	0	99-100	97-100	90-100	80-98	66-93	39-60
	18-25	Clay	CH	A-7-6	0	0	99-100	97-100	90-100	80-98	66-93	39-60
	25-37	Clay loam, sandy loam, loamy sand	CL, SC, SC- SM, SM	A-2-4, A-4	0	0	95-100	85-100	50-90	5-70	0-48	NP-25
	37-45	Clay loam, sandy loam, loamy sand	SM, SC-SM, SC, CL	A-4, A-2-4	0	0	95-100	85-100	50-90	5-70	0-48	NP-25
	45-80	Fine sandy loam, sand, loamy sand, sandy loam	SP-SM, SC-SM, SM	A-4, A-2-4	0	0	95-100	85-100	40-70	5-70	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
219B: Froberg-----	0-4	Clay loam, clay	CL, CH	A-7-6	0	0	97-100	95-100	80-100	70-95	39-57	18-32
	4-8	Clay, clay loam	CH	A-7-6	0	0	97-100	95-100	80-100	70-95	43-66	21-39
	8-22	Clay	CH, CL	A-7-6	0	0	97-100	90-100	85-100	75-98	48-84	25-53
	22-32	Clay	CH, CL	A-7-6	0	0-7	85-100	75-100	65-95	55-95	48-84	25-53
	32-45	Fine sandy loam, sandy loam, sandy clay loam	CL, CL-ML	A-4, A-6	0	0-7	90-100	70-100	50-95	30-85	21-43	4-21
	45-80	Sandy clay loam, fine sandy loam, sandy loam	CL-ML, CL, SC, SM	A-4, A-6, A- 2-4	0	0	90-100	70-100	50-95	30-85	21-43	4-21
222: Matchwood-----	0-1	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-4	Mucky clay, clay	CH	A-7	0	0	95-100	80-100	75-100	70-98	66-97	39-63
	4-10	Clay, silty clay	CH	A-7	0	0	95-100	80-100	75-100	70-98	66-97	39-63
	10-29	Clay, silty clay	CH	A-7	0	0	95-100	80-100	75-100	70-98	66-97	39-63
	29-50	Silty clay loam, loam, clay	CL-ML, CL, ML	A-6, A-4	0	0	92-100	75-100	70-100	60-90	21-66	4-39
	50-80	Loam, silt loam, silty clay loam	CL, ML	A-6, A-4	0	0	92-100	75-100	70-100	60-90	21-66	4-39
225A: Cuttre-----	0-3	Clay	CH	A-6, A-7	0	0-3	95-100	90-100	85-100	55-95	35-66	15-39
	3-6	Silty clay, silty clay loam, clay loam, clay	CH, CL	A-7, A-6	0	0-3	95-100	90-100	85-100	55-95	35-66	15-39
	6-12	Silty clay loam, clay, silty clay	CL, CH	A-7-6	0	0-3	95-100	90-100	85-100	75-95	43-75	21-46
	12-25	Clay	CH	A-7-6	0	0	100	100	80-100	70-95	66-88	39-56
	25-41	Clay	CH	A-7-6	0	0	100	100	80-100	70-95	66-88	39-56
	41-80	Clay	CH	A-7-6	0	0	100	100	80-100	70-95	66-84	39-53

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
225A: Bergland-----	0-1	Mucky peat	PT	A-8	0	0	100	100	100	90-100	---	NP
	1-3	Mucky clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	61-93	35-60
	3-8	Silty clay, clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	61-93	35-60
	8-13	Clay, silty clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	61-93	35-60
	13-25	Clay, silty clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	61-93	35-60
	25-35	Clay, silty clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	57-93	32-60
	35-48	Clay, silty clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	57-93	32-60
	48-80	Silty clay, clay	CH	A-7-6	0	0	95-100	90-100	80-100	70-100	57-93	32-60
226B: Froberg-----	0-4	Clay loam, clay	CL, CH	A-7-6	0	0	97-100	95-100	80-100	70-95	39-57	18-32
	4-8	Clay, clay loam	CH	A-7-6	0	0	97-100	95-100	80-100	70-95	43-66	21-39
	8-22	Clay	CH, CL	A-7-6	0	0	97-100	90-100	85-100	75-98	48-84	25-53
	22-32	Clay	CH, CL	A-7-6	0	0-7	85-100	75-100	65-95	55-95	48-84	25-53
	32-45	Sandy clay loam, sandy loam, fine sandy loam	CL, CL-ML	A-4, A-6	0	0-7	90-100	70-100	50-95	30-85	21-43	4-21
	45-80	Fine sandy loam, sandy loam, sandy clay loam	CL-ML, CL, SC, SM	A-4, A-6, A- 2-4	0	0	90-100	70-100	50-95	30-85	21-43	4-21

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
230B: Moquah-----	0-5	Loam, silt loam, fine sandy loam	ML	A-4	0	0	100	98-100	90-100	40-60	0-21	NP-4
	5-19	Stratified loamy fine sand to loamy very fine sand to silt loam	SM, ML	A-4	0	0	100	98-100	90-100	40-60	0-28	NP-9
	19-48	Stratified fine sand to very fine sandy loam to silt loam	ML	A-4	0	0	100	98-100	90-100	40-60	0-28	NP-9
	48-55	Stratified silt loam, stratified sand to fine sand to loamy very fine sand to very fine sandy loam	ML, SM	A-4, A-2-4	0	0	100	98-100	90-100	20-60	0-28	NP-9
	55-80	Stratified sand to fine sand to loamy fine sand to silt loam	ML, SM	A-4, A-2-4	0	0	100	98-100	90-100	20-60	0-28	NP-9
Arnheim-----	0-5	Mucky silt loam, very fine sandy loam, loamy very fine sand, silt loam	SM, CL-ML, ML	A-4	0	0	100	95-100	60-100	30-90	0-28	NP-9
	5-10	Very fine sandy loam, silt loam	CL-ML, ML, SM	A-4	0	0	100	95-100	60-100	30-90	0-28	NP-9
	10-80	Stratified very fine sandy loam to silt loam to loamy fine sand to fine sandy loam	CL-ML, ML, SM	A-4	0	0	100	95-100	60-100	30-90	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
231: Matchwood-----	0-1	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-4	Clay, mucky clay	CH	A-7	0	0	95-100	80-100	75-100	70-98	66-97	39-63
	4-10	Silty clay, clay	CH	A-7	0	0	95-100	80-100	75-100	70-98	66-97	39-63
	10-29	Silty clay, clay	CH	A-7	0	0	95-100	80-100	75-100	70-98	66-97	39-63
	29-50	Clay, silty clay loam, loam	CL-ML, CL, ML	A-6, A-4	0	0	92-100	75-100	70-100	60-90	21-66	4-39
	50-80	Silty clay loam, silt loam, loam	CL, ML	A-6, A-4	0	0	92-100	75-100	70-100	60-90	21-66	4-39
Dorval-----	0-4	Muck	PT	A-8	0	0-1	0	0	0	0	---	NP
	4-14	Muck	PT	A-8	0	0-1	0	0	0	0	---	NP
	14-32	Muck	PT	A-8	0	0-1	0	0	0	0	---	NP
	32-44	Silty clay loam, clay, silty clay	CL	A-6	0	0	90-100	90-100	60-100	50-100	30-40	12-32
	44-50	Stratified silty clay to clay, stratified silt loam to silty clay loam	CL	A-6	0	0	90-100	90-100	60-100	50-100	30-40	11-32
	50-80	Sandy loam, gravelly sandy loam	SM, SC-SM	A-4, A-2-4	0	0	85-100	55-100	30-90	10-55	15-25	NP-10

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
233: Schaat Creek----	0-5	Silty clay loam, silt loam	ML	A-4, A-6	0	0-5	97-100	97-100	80-100	65-95	31-38	6-14
	5-10	Silt loam, silty clay loam, loam	ML	A-6, A-4	0	0-5	90-100	90-100	75-100	55-95	31-38	6-14
	10-19	Silty clay loam, clay loam	CL	A-4, A-6	0	0-5	90-100	90-100	50-90	50-90	31-38	6-14
	19-43	Clay loam, sandy clay loam, silty clay loam	CL, SC	A-7	0	0-5	90-100	90-100	70-100	30-95	41-55	15-35
	43-54	Silt loam, silty clay loam, clay loam	CL	A-6	0	0-5	90-100	85-100	80-100	65-95	30-40	11-25
	54-80	Silty clay loam, silt loam	CL, ML	A-6, A-4	0	0-5	90-100	90-100	80-100	65-95	25-38	NP-13
239D: Miskoaki-----	0-4	Silty clay loam, silt loam	CL, CH	A-7, A-6	0	0-3	95-100	90-100	85-100	55-95	34-66	14-39
	4-10	Silty clay loam, clay, silt loam	CH, CL	A-7, A-6	0	0-3	95-100	90-100	85-100	55-95	34-66	14-39
	10-25	Clay	CH	A-7-6	0	0-3	95-100	90-100	85-100	75-100	66-89	39-57
	25-53	Clay	CH	A-7-6	0	0-3	95-100	90-100	85-100	75-100	66-89	39-57
	53-80	Clay	CH	A-7-6	0	0-3	95-100	90-100	85-100	75-100	66-89	39-57

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
277B: Kellogg, sandy substratum-----	0-6	Sand, loamy sand	SM, SP-SM	A-2-4, A-3	0	0-8	95-100	85-100	40-70	5-40	---	NP-1
	6-9	Loamy sand, sand	SM, SP-SM	A-2-4, A-3	0	0-8	95-100	85-100	40-70	5-40	---	NP-1
	9-24	Loamy sand, sand	SP-SM, SM	A-2-4, A-3	0	0-8	95-100	85-100	40-70	5-40	---	NP-1
	24-31	Sandy loam, sandy clay loam	SM, SC-SM	A-4	0	0-8	95-100	85-100	50-70	20-55	16-30	1-11
	31-37	Clay, silty clay loam, silty clay	CL, CH	A-7-6	0	0-8	98-100	95-100	80-100	70-95	43-66	21-39
	37-59	Clay, silty clay loam, silty clay	CL, CH	A-7-6	0	0-8	98-100	95-100	80-100	70-95	43-66	21-39
	59-80	Sand, gravelly sand	SP-SM, SP	A-2-4, A-3	0-15	0-30	85-100	55-95	35-70	0-40	---	NP
Allendale-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	NP
	1-2	Fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-3	0	0-1	95-100	90-100	70-90	3-50	---	NP
	2-6	Fine sandy loam, loamy sand, fine sand	SC-SM, SM, SP-SM	A-2-4, A-3, A-4	0	0-1	95-100	90-100	60-90	3-50	0-25	NP-7
	6-15	Fine sand	SP, SP-SM	A-3, A-2-4	0	0-1	95-100	90-100	45-60	0-30	0-30	NP-5
	15-23	Loamy fine sand, fine sand	SP, SP-SM	A-3, A-2-4	0	0-1	95-100	90-100	45-60	0-30	0-30	NP-5
	23-24	Loamy fine sand, fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0-1	95-100	90-100	60-90	30-50	0-25	NP-7
	24-35	Clay, clay loam	CL, CH	A-7	0	0-1	98-100	90-100	65-100	65-100	44-54	22-33
	35-80	Clay loam, silty clay loam	CH, CL	A-7	0	0-1	98-100	90-100	65-100	65-100	44-54	22-33

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
280B: Flintsteel-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-5	Loam, fine sandy loam, silt loam	CL, CL-ML	A-4	0	0-8	95-100	85-100	55-95	40-80	21-30	4-11
	5-9	Silt loam, loam, fine sandy loam	ML	A-4	0	0-8	95-100	85-100	55-95	40-80	0-21	NP-4
	9-12	Loam, fine sandy loam, silt loam	CL-ML, CL, ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	20-34	3-14
	12-16	Loam, fine sandy loam, silt loam	CL, CL-ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	21-34	4-14
	16-22	Loam, fine sandy loam, silt loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	80-100	50-95	35-80	21-36	4-15
	22-36	Silt loam, loam, clay loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	25-37	7-16
	36-48	Silt loam, loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	21-30	4-11
	48-80	Silt loam, loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-90	21-30	4-11
280C: Flintsteel-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-5	Loam, silt loam, fine sandy loam	CL, CL-ML	A-4	0	0-8	95-100	85-100	55-95	40-80	21-30	4-11
	5-9	Fine sandy loam, loam, silt loam	ML	A-4	0	0-8	95-100	85-100	55-95	40-80	0-21	NP-4
	9-12	Loam, fine sandy loam, silt loam	CL-ML, CL, ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	20-34	3-14
	12-16	Loam, fine sandy loam, silt loam	CL, CL-ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	21-34	4-14
	16-22	Loam, fine sandy loam, silt loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	80-100	50-95	35-80	21-36	4-15
	22-36	Clay loam, silt loam, loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	25-37	7-16
	36-48	Loam, silt loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	21-30	4-11
	48-80	Silt loam, loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-90	21-30	4-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
282B: Big Iron-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-3	Silt loam, fine sandy loam, loam	CL-ML, ML	A-4	0	0-7	95-100	85-100	75-95	55-80	16-23	NP-6
	3-4	Silt loam, fine sandy loam, loam	CL-ML, ML	A-4	0	0-7	95-100	85-100	75-95	55-80	16-23	NP-6
	4-11	Silt loam, fine sandy loam, loam	CL-ML, ML	A-4	0	0-7	95-100	85-100	75-95	55-80	16-26	NP-8
	11-17	Silt loam, fine sandy loam, loam	CL-ML, ML	A-4	0	0-7	95-100	85-100	75-95	55-80	17-26	1-8
	17-47	Silt loam, clay loam, loam	CL, CL-ML, ML	A-4, A-6	0	0-7	95-100	85-100	75-95	55-80	17-34	1-14
	47-66	Loam, silt loam	CL, CL-ML, ML	A-6, A-4	0	0-7	80-100	60-100	40-95	30-80	17-34	1-14
	66-80	Silt loam, loam	CL, CL-ML, ML	A-6, A-4	0	0-5	80-100	60-100	40-95	30-80	14-30	NP-11
Flintsteel-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-5	Fine sandy loam, loam, silt loam	CL, CL-ML	A-4	0	0-8	95-100	85-100	55-95	40-80	21-30	4-11
	5-9	Silt loam, fine sandy loam, loam	ML	A-4	0	0-8	95-100	85-100	55-95	40-80	0-21	NP-4
	9-12	Silt loam, fine sandy loam, loam	CL-ML, CL, ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	20-34	3-14
	12-16	Silt loam, fine sandy loam, loam	CL, CL-ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	21-34	4-14
	16-22	Loam, silt loam, fine sandy loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	80-100	50-95	35-80	21-36	4-15
	22-36	Clay loam, loam, silt loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	25-37	7-16
	36-48	Loam, silt loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	21-30	4-11
	48-80	Loam, silt loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-90	21-30	4-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
283B: Loggerhead-----	0-4	Loam, fine sandy loam, loamy sand	ML, SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-60	0-48	NP-17
	4-5	Silt loam, gravelly fine sandy loam, loamy sand	ML, SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-60	0-45	NP-17
	5-15	Loamy sand, sand, fine sandy loam, gravelly loam	SM, ML, SP-SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-60	0-41	NP-17
	15-38	Gravelly fine sandy loam, gravelly loam, silt loam	CL-ML, ML, SM	A-4	0	0-7	90-100	85-100	50-95	40-75	0-37	NP-17
	38-56	Gravelly fine sandy loam, loam, silt loam	CL, CL-ML, ML	A-4	0	0-7	90-100	85-100	70-95	40-90	16-36	2-17
	56-80	Loam, clay loam, silt loam	CL-ML, CL	A-6, A-4	0	0-7	90-100	85-100	70-95	40-90	20-44	6-25
Noseum-----	0-1	Highly decomposed plant material	PT	A-8	0	0-7	100	100	100	100	---	NP
	1-4	Fine sandy loam, sandy loam	SC-SM, ML, SM	A-4	0	0-7	95-100	90-100	55-85	10-70	0-25	NP-7
	4-6	Fine sandy loam, sandy loam	SC-SM, ML, SM	A-4	0	0-7	95-100	90-100	55-85	10-70	0-25	NP-7
	6-14	Sandy loam, fine sandy loam	SC-SM, ML, SM	A-4	0	0-7	95-100	90-100	55-85	10-70	0-25	NP-7
	14-24	Loamy fine sand, loamy sand, sand	SP-SM, SM	A-4, A-2-4	0	0-7	95-100	90-100	45-75	10-50	0-21	NP-4
	24-37	Sand, fine sand	SP, SM, SP-SM	A-2-4, A-3	0	0-7	95-100	90-100	45-75	0-35	---	NP
	37-63	Sand, fine sand	SM, SP, SP-SM	A-2-4, A-3	0	0-7	95-100	90-100	45-75	0-35	---	NP
63-80	Sand, fine sand	SP, SM, SP-SM	A-2-4, A-3	0	0-7	95-100	90-100	45-75	0-35	---	NP	

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
							4	10	40	200		
	In				Pct	Pct					Pct	
283B: Ubly-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam	SM, ML, CL-ML	A-4, A-2-4	0	0-7	95-100	85-100	75-95	35-65	0-25	NP-7
	4-10	Fine sandy loam, loamy fine sand	SM, ML, CL-ML	A-4, A-2-4	0	0-7	95-100	85-100	75-95	35-65	0-25	NP-7
	10-12	Loamy fine sand, fine sandy loam	ML, SM, CL-ML	A-2-4, A-4	0	0-7	95-100	85-100	75-95	35-65	0-25	NP-7
	12-18	Loamy fine sand, fine sandy loam	SM, ML	A-4, A-2-4	0	0-7	95-100	85-100	75-95	35-65	0-25	NP-7
	18-29	Fine sandy loam, silt loam, loam	ML, CL-ML, CL	A-6, A-4	0	0-7	95-100	90-100	85-98	50-75	16-34	1-14
	29-44	Loam, silty clay loam, silt loam	ML, CL, CL-ML	A-4, A-6	0	0-7	95-100	90-100	85-98	50-75	21-39	4-18
	44-80	Silt loam, silty clay loam, loam	ML, CL, CL-ML	A-4, A-6	0	0-7	95-100	90-100	85-98	50-75	21-39	4-18
	283C: Loggerhead-----	0-4	Loam, loamy sand, fine sandy loam	ML, SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-60	0-48
4-5		Gravelly fine sandy loam, loamy sand, silt loam	ML, SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-60	0-45	NP-17
5-15		Gravelly loam, loamy sand, fine sandy loam, sand	SM, ML, SP-SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-60	0-41	NP-17
15-38		Silt loam, gravelly loam, gravelly fine sandy loam	CL-ML, ML, SM	A-4	0	0-7	90-100	85-100	50-95	40-75	0-37	NP-17
38-56		Gravelly fine sandy loam, silt loam, loam	CL, CL-ML, ML	A-4	0	0-7	90-100	85-100	70-95	40-90	16-36	2-17
56-80		Clay loam, silt loam, loam	CL-ML, CL	A-6, A-4	0	0-7	90-100	85-100	70-95	40-90	20-44	6-25

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
283C: Noseum-----	0-1	Highly decomposed plant material	PT	A-8	0	0-7	100	100	100	100	---	NP
	1-4	Sandy loam, fine sandy loam	SC-SM, ML, SM	A-4	0	0-7	95-100	90-100	55-85	10-70	0-25	NP-7
	4-6	Fine sandy loam, sandy loam	SC-SM, ML, SM	A-4	0	0-7	95-100	90-100	55-85	10-70	0-25	NP-7
	6-14	Sandy loam, fine sandy loam	SC-SM, ML, SM	A-4	0	0-7	95-100	90-100	55-85	10-70	0-25	NP-7
	14-24	Loamy sand, loamy fine sand, sand	SP-SM, SM	A-4, A-2-4	0	0-7	95-100	90-100	45-75	10-50	0-21	NP-4
	24-37	Sand, fine sand	SP, SM, SP-SM	A-2-4, A-3	0	0-7	95-100	90-100	45-75	0-35	---	NP
	37-63	Fine sand, sand	SM, SP, SP-SM	A-2-4, A-3	0	0-7	95-100	90-100	45-75	0-35	---	NP
	63-80	Sand, fine sand	SP, SM, SP-SM	A-2-4, A-3	0	0-7	95-100	90-100	45-75	0-35	---	NP
	Ubly-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---
1-4		Loamy fine sand, fine sandy loam	SM, ML, CL-ML	A-4, A-2-4	0	0-7	95-100	85-100	75-95	35-65	0-25	NP-7
4-10		Fine sandy loam, loamy fine sand	SM, ML, CL-ML	A-4, A-2-4	0	0-7	95-100	85-100	75-95	35-65	0-25	NP-7
10-12		Loamy fine sand, fine sandy loam	ML, SM, CL-ML	A-2-4, A-4	0	0-7	95-100	85-100	75-95	35-65	0-25	NP-7
12-18		Fine sandy loam, loamy fine sand	SM, ML	A-4, A-2-4	0	0-7	95-100	85-100	75-95	35-65	0-25	NP-7
18-29		Loam, silt loam, fine sandy loam	ML, CL-ML, CL	A-6, A-4	0	0-7	95-100	90-100	85-98	50-75	16-34	1-14
29-44		Silty clay loam, silt loam, loam	ML, CL, CL-ML	A-4, A-6	0	0-7	95-100	90-100	85-98	50-75	21-39	4-18
44-80		Loam, silt loam, silty clay loam	ML, CL, CL-ML	A-4, A-6	0	0-7	95-100	90-100	85-98	50-75	21-39	4-18

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
284: Aquents-----	0-80	Variable	---	---	---	---	---	---	---	---	---	---
Gull Point-----	0-1	Peat	PT	A-8	0	0	100	100	100	90-100	---	NP
	1-7	Loam, silt loam	CL-ML, CL	A-6, A-4	0	0-7	95-100	85-100	75-98	55-80	25-36	7-15
	7-15	Silt loam, loam	CL-ML, CL	A-4, A-6	0	0-7	95-100	85-100	75-98	55-80	25-36	7-15
	15-28	Loam, clay loam, silt loam	CL-ML, CL	A-6, A-4	0	0-7	95-100	85-100	75-98	55-80	25-41	7-20
	28-33	Clay loam, silt loam, loam	CL-ML, CL	A-4, A-6	0	0-7	95-100	85-100	75-98	55-80	25-41	7-20
	33-40	Silt loam, loam	CL-ML, CL	A-4, A-6	0	0-7	95-100	85-100	75-98	55-80	25-36	7-15
	40-61	Silt loam, loam	CL-ML, CL	A-6, A-4	0	0-7	95-100	85-100	75-98	55-80	25-36	7-15
	61-80	Silt loam, loam	CL-ML, CL	A-4, A-6	0	0-7	95-100	85-100	75-98	55-80	25-36	7-15
285F: Rockland-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	NP
	1-5	Loam, silt loam	CL-ML, ML	A-4	0-5	0-7	90-100	85-100	70-95	60-90	0-25	NP-7
	5-23	Silty clay loam, loam, silt loam	CL-ML, ML, CL	A-4, A-6	0-5	0-7	90-100	85-100	70-95	60-90	17-39	1-18
	23-80	Silt loam, loam, silty clay loam	CL-ML, CL, ML	A-4, A-6	0-5	0-7	90-100	85-100	70-95	60-90	17-39	1-18
Arnheim-----	0-5	Mucky silt loam, very fine sandy loam, loamy very fine sand, silt loam	SM, CL-ML, ML	A-4	0	0	100	95-100	60-100	30-90	0-28	NP-9
	5-10	Silt loam, very fine sandy loam	CL-ML, ML, SM	A-4	0	0	100	95-100	60-100	30-90	0-28	NP-9
	10-80	Stratified very fine sandy loam to silt loam to loamy fine sand to fine sandy loam	CL-ML, ML, SM	A-4	0	0	100	95-100	60-100	30-90	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
286A: Big Iron-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-3	Silt loam, fine sandy loam, loam	CL-ML, ML	A-4	0	0-7	95-100	85-100	75-95	55-80	16-23	NP-6
	3-4	Silt loam, fine sandy loam, loam	CL-ML, ML	A-4	0	0-7	95-100	85-100	75-95	55-80	16-23	NP-6
	4-11	Fine sandy loam, loam, silt loam	CL-ML, ML	A-4	0	0-7	95-100	85-100	75-95	55-80	16-26	NP-8
	11-17	Silt loam, fine sandy loam, loam	CL-ML, ML	A-4	0	0-7	95-100	85-100	75-95	55-80	17-26	1-8
	17-47	Loam, clay loam, silt loam	CL, CL-ML, ML	A-4, A-6	0	0-7	95-100	85-100	75-95	55-80	17-34	1-14
	47-66	Loam, silt loam	CL, CL-ML, ML	A-6, A-4	0	0-7	80-100	60-100	40-95	30-80	17-34	1-14
	66-80	Loam, silt loam	CL, CL-ML, ML	A-6, A-4	0	0-5	80-100	60-100	40-95	30-80	14-30	NP-11
Belding-----	0-1	Highly decomposed plant material	PT	A-8	0	0-7	100	100	100	100	---	NP
	1-4	Fine sandy loam, loamy sand, sandy loam, loamy fine sand	SM, SC-SM, ML	A-2-4, A-4	0	0-7	95-100	85-100	45-98	25-55	0-28	NP-9
	4-9	Loamy fine sand, sandy loam, loamy sand, fine sandy loam	SM, ML, SC-SM	A-2-4, A-4	0	0-7	95-100	85-100	40-98	25-55	0-28	NP-9
	9-14	Sandy loam, loamy sand, fine sandy loam, loamy fine sand	ML, SC-SM, SM	A-2-4, A-4	0	0-7	95-100	85-100	40-98	25-55	0-28	NP-9
	14-19	Fine sandy loam, sandy loam, loamy sand, loamy fine sand, fine sand	ML, SC-SM, SM	A-2-4, A-4	0	0-7	95-100	85-100	40-98	25-55	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
286A: (Belding)	19-22	Fine sand, loamy sand, fine sandy loam, loamy fine sand, sandy loam	ML, SC-SM, SM	A-2-4, A-4	0	0-7	95-100	85-100	40-98	15-55	0-28	NP-9
	22-34	Silty clay loam, clay loam, loam, silt loam	CL-ML, CL	A-4, A-6	0	0-7	95-100	85-100	35-98	20-95	21-48	4-25
	34-36	Silty clay loam, clay loam, loam, silt loam	CL, CL-ML	A-4, A-6	0	0-7	95-100	85-100	35-98	20-95	21-48	4-25
	36-80	Silty clay loam, clay loam, loam, silt loam	CL, CL-ML	A-4, A-6	0	0-7	95-100	85-100	35-98	20-95	21-48	4-25
287: Trap Falls-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-7	100	100	100	100	---	NP
	1-10	Mucky silt loam, fine sandy loam, loam	CL-ML, ML	A-4	0	0-7	95-100	85-100	75-95	55-80	15-38	NP-18
	10-18	Silty clay loam, silt loam, loam, clay loam	CL, CL-ML, ML	A-4, A-6	0	0-7	95-100	85-100	75-100	55-100	15-44	NP-22
	18-31	Silty clay loam, silt loam, loam, clay loam	ML, CL, CL-ML	A-4, A-6	0	0-7	95-100	85-100	75-100	55-100	15-44	NP-22
	31-55	Loam, silt loam	CL, CL-ML, ML	A-6, A-4	0	0-7	95-100	85-100	75-100	55-80	15-30	NP-15
	55-80	Loam, gravelly silt loam, gravelly sandy loam	CL, CL-ML, ML	A-6, A-4	0	0-7	85-100	75-100	40-95	30-80	15-30	NP-15

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
287: Tonkey-----	0-8	Mucky fine sandy loam, silt loam	SM, ML	A-4	0	0	100	100	50-100	40-100	29-40	7-18
	8-13	Silt loam, very fine sandy loam	CL-ML, ML	A-4	0	0	100	100	50-100	30-90	17-27	NP-10
	13-28	Stratified fine sandy loam to loamy sand to silt loam to sandy loam	SM, ML	A-4	0	0	100	100	10-90	10-85	17-27	NP-10
	28-80	Stratified fine sandy loam to sandy loam to silt loam to loamy sand	SM, ML	A-4	0	0	100	100	10-90	10-85	15-24	NP-10
289B: Amasa-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-4	Cobbly fine sandy loam, gravelly very fine sandy loam, cobbly silt loam	ML, SM, CL- ML, SC-SM	A-4	0-3	0-50	80-100	55-100	40-90	20-80	0-30	NP-11
	4-7	Gravelly fine sandy loam, silt loam, gravelly loam, gravelly very fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-3	0-50	80-100	55-100	40-90	20-80	0-30	NP-11
	7-23	Very fine sandy loam, gravelly fine sandy loam, gravelly silt loam, gravelly loam	CL-ML, ML, SC-SM, SM	A-4, A-2-4	0-3	0-50	80-100	55-100	40-90	20-70	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
289B: (Amasa)	23-28	Gravelly loam, fine sandy loam, gravelly silt loam, very fine sandy loam	CL-ML, ML, SC-SM, SM	A-2-4, A-4	0-3	0-50	80-100	55-100	40-90	20-70	0-25	NP-7
	28-41	Gravelly coarse sand, sand	SP-SM, SP, SM, GM	A-2-4, A-1-b, A-1-a	0-8	0-50	50-100	25-100	0-75	0-25	0-16	NP-1
	41-80	Gravelly coarse sand, very gravelly sand, gravelly sand	GM, SP-SM	A-1-b, A-2-4, A-1-a	0-8	0-50	50-100	25-100	0-75	0-25	0-16	NP-1
290B: Flintsteel-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-5	Silt loam	CL, CH	A-7-6, A-6	0	0-3	95-100	90-100	85-100	55-95	35-66	15-39
	5-9	Fine sandy loam, silt loam, loam	ML	A-4	0	0-8	95-100	85-100	55-95	40-80	0-21	NP-4
	9-12	Silt loam, fine sandy loam, loam	CL-ML, CL, ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	20-34	3-14
	12-16	Silt loam, fine sandy loam, loam	CL, CL-ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	21-34	4-14
	16-22	Silt loam, fine sandy loam, loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	80-100	50-95	35-80	21-36	4-15
	22-36	Clay loam, loam, silt loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	25-37	7-16
	36-48	Silt loam, loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	21-30	4-11
	48-80	Silt loam, loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-90	21-30	4-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
290C: Flintsteel-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-5	Silt loam	CL, CH	A-7-6, A-6	0	0-3	95-100	90-100	85-100	55-95	35-66	15-39
	5-9	Silt loam, loam, fine sandy loam	ML	A-4	0	0-8	95-100	85-100	55-95	40-80	0-21	NP-4
	9-12	Silt loam, fine sandy loam, loam	CL-ML, CL, ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	20-34	3-14
	12-16	Silt loam, fine sandy loam, loam	CL, CL-ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	21-34	4-14
	16-22	Loam, silt loam, fine sandy loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	80-100	50-95	35-80	21-36	4-15
	22-36	Clay loam, silt loam, loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	25-37	7-16
	36-48	Silt loam, loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	21-30	4-11
	48-80	Silt loam, loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-90	21-30	4-11
291B: Kalkaska-----	0-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-6	Sand, loamy sand	SP-SM, SP	A-3, A-2-4	0	0-5	95-100	90-100	50-85	0-15	---	NP
	6-8	Sand	SP, SP-SM	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	8-17	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	17-32	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	32-80	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
291D: Kalkaska-----	0-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-6	Loamy sand, sand	SP-SM, SP	A-3, A-2-4	0	0-5	95-100	90-100	50-85	0-15	---	NP
	6-8	Sand	SP, SP-SM	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	8-17	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	17-32	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	32-80	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
292B: Manido-----	In				Pct	Pct					Pct	
	0-3	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	3-9	Sand, fine sand	SM, SP-SM	A-2-4, A-3	0	0-1	95-100	95-100	60-95	5-40	0-21	NP-5
	9-11	Sand, fine sand	SM, SP-SM	A-2-4, A-3	0-1	0-1	95-100	95-100	60-95	5-40	0-21	NP-5
	11-17	Fine sand, sand	SM, SP-SM	A-2-4, A-3	0-1	0-1	95-100	95-100	60-95	5-40	0-21	NP-5
	17-37	Fine sand, sand	SM, SP-SM	A-2-4, A-3	0-1	0-1	95-100	95-100	60-95	1-40	0-21	NP-5
	37-60	Stratified loamy sand to loamy fine sand, stratified fine sand to sand to very fine sand	CL-ML, ML, SP-SM, SM	A-3, A-2-4	0-1	0-1	95-100	95-100	50-95	1-50	0-21	NP-5
	60-80	Stratified fine sand to sand to very fine sand	CL-ML, ML, SP-SM, SM	A-3, A-2-4	0-1	0-1	95-100	95-100	50-95	1-50	0-21	NP-5
Richter-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-4	Loamy fine sand, sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0	0	95-100	90-100	55-95	30-65	---	NP
	4-6	Loamy fine sand, sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0	0	95-100	90-100	60-90	30-65	15-25	NP-10
	6-10	Sandy loam, fine sandy loam, loamy sand	ML, SM	A-2-4, A-4	0	0	95-100	90-100	50-85	15-60	15-25	NP-10
	10-18	Sandy loam, loamy sand	ML, SM	A-2-4, A-4	0	0	95-100	90-100	50-75	20-50	15-25	NP-10
	18-35	Fine sand, loamy very fine sand, silt	SM, ML	A-2-4, A-4	0	0	95-100	90-100	60-90	30-65	---	NP
	35-80	Stratified very fine sand to sandy loam to silt loam to silt	ML, SM	A-4	0	0	95-100	90-100	55-90	30-65	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
293A: Wainola-----	0-3	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	3-10	Loamy fine sand, fine sand	SP-SM, SM, SP	A-2-4, A-3	0	0	90-100	90-100	30-100	0-50	---	NP
	10-12	Fine sand, loamy very fine sand, loamy fine sand	SM, SP, SP-SM	A-2-4, A-3	0	0	90-100	90-100	45-100	0-55	---	NP
	12-26	Fine sand, loamy fine sand, loamy very fine sand	SM, SP, SP-SM	A-2-4, A-3	0	0	90-100	90-100	45-100	0-55	---	NP
	26-32	Fine sand	SM, SP, SP-SM	A-2-4, A-3	0	0	90-100	90-100	70-100	0-40	---	NP
	32-80	Stratified fine sand to very fine sand to loamy fine sand	SP, SM, SP-SM	A-2-4, A-3	0	0	90-100	90-100	45-100	0-55	---	NP
Trap Falls-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-7	100	100	100	100	---	NP
	1-10	Mucky silt loam, fine sandy loam, loam	CL-ML, ML	A-4	0	0-7	95-100	85-100	75-95	55-80	15-38	NP-18
	10-18	Silty clay loam, silt loam, loam, clay loam	CL, CL-ML, ML	A-4, A-6	0	0-7	95-100	85-100	75-100	55-100	15-44	NP-22
	18-31	Silty clay loam, silt loam, loam, clay loam	ML, CL, CL-ML	A-4, A-6	0	0-7	95-100	85-100	75-100	55-100	15-44	NP-22
	31-55	Loam, silt loam	CL, CL-ML, ML	A-6, A-4	0	0-7	95-100	85-100	75-100	55-80	15-30	NP-15
	55-80	Gravelly sandy loam, loam, gravelly silt loam	CL, CL-ML, ML	A-6, A-4	0	0-7	85-100	75-100	40-95	30-80	15-30	NP-15

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
296B: Manido-----	0-3	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	3-9	Sand, fine sand	SM, SP-SM	A-2-4, A-3	0	0-1	95-100	95-100	60-95	5-40	0-21	NP-5
	9-11	Sand, fine sand	SM, SP-SM	A-2-4, A-3	0-1	0-1	95-100	95-100	60-95	5-40	0-21	NP-5
	11-17	Sand, fine sand	SM, SP-SM	A-2-4, A-3	0-1	0-1	95-100	95-100	60-95	5-40	0-21	NP-5
	17-37	Sand, fine sand	SM, SP-SM	A-2-4, A-3	0-1	0-1	95-100	95-100	60-95	1-40	0-21	NP-5
	37-60	Stratified fine sand to sand to very fine sand, stratified loamy sand to loamy fine sand	CL-ML, ML, SP-SM, SM	A-3, A-2-4	0-1	0-1	95-100	95-100	50-95	1-50	0-21	NP-5
	60-80	Stratified fine sand to sand to very fine sand	CL-ML, ML, SP-SM, SM	A-3, A-2-4	0-1	0-1	95-100	95-100	50-95	1-50	0-21	NP-5
Fence-----	0-6	Very fine sandy loam	ML	A-4	0	0	100	95-100	85-100	70-90	0-20	NP-4
	6-7	Silt loam, very fine sandy loam, silt	CL-ML, ML	A-4	0	0	100	96-100	85-100	50-100	0-30	NP-7
	7-13	Silt loam, very fine sandy loam	CL-ML, ML	A-4	0	0	100	96-100	85-100	50-100	15-30	NP-7
	13-15	Silt loam, very fine sandy loam, silt	CL-ML, ML	A-4	0	0	100	96-100	85-100	50-100	15-30	NP-7
	15-20	Silt loam, very fine sandy loam, silt	CL-ML, ML	A-4	0	0	100	96-100	85-100	50-100	15-30	NP-7
	20-35	Silt loam, silt	CL-ML, ML	A-4	0	0	100	96-100	90-100	70-100	20-30	NP-9
	35-80	Stratified silt loam to silt	CL-ML, ML	A-4	0	0	100	96-100	90-100	70-100	20-30	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
296B: Gogebic, sandy substratum-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Gravelly silt loam, fine sandy loam, cobbly very fine sandy loam, sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Silt loam, gravelly fine sandy loam, cobbly very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Gravelly fine sandy loam, cobbly very fine sandy loam, sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Fine sandy loam, very fine sandy loam, cobbly sandy loam, gravelly silt loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, gravelly fine sandy loam, sandy loam, cobbly loamy very fine sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Loamy fine sand, gravelly loamy fine sand, fine sandy loam, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
296B: (Gogebic)	49-54	Fine sandy loam, gravelly loam, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Gravelly sandy loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sand, gravelly sand	SP-SM, SP	A-2-4, A-3	0-15	0-30	85-100	55-95	35-70	0-40	---	NP
296D: Manido-----	0-3	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	3-9	Sand, fine sand	SM, SP-SM	A-2-4, A-3	0	0-1	95-100	95-100	60-95	5-40	0-21	NP-5
	9-11	Sand, fine sand	SM, SP-SM	A-2-4, A-3	0-1	0-1	95-100	95-100	60-95	5-40	0-21	NP-5
	11-17	Sand, fine sand	SM, SP-SM	A-2-4, A-3	0-1	0-1	95-100	95-100	60-95	5-40	0-21	NP-5
	17-37	Sand, fine sand	SM, SP-SM	A-2-4, A-3	0-1	0-1	95-100	95-100	60-95	1-40	0-21	NP-5
	37-60	Stratified loamy sand to loamy fine sand, stratified fine sand to sand to very fine sand	CL-ML, ML, SP-SM, SM	A-3, A-2-4	0-1	0-1	95-100	95-100	50-95	1-50	0-21	NP-5
	60-80	Stratified fine sand to sand to very fine sand	CL-ML, ML, SP-SM, SM	A-3, A-2-4	0-1	0-1	95-100	95-100	50-95	1-50	0-21	NP-5

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
296D: Sporley-----	0-6	Very fine sandy loam	ML	A-4	0	0	100	95-100	85-100	70-90	0-20	NP-4
	6-7	Silt loam, fine sandy loam	ML	A-4	0	0-5	98-100	98-100	50-100	50-100	31-38	6-14
	7-12	Silt loam, fine sandy loam	ML	A-4	0	0-5	98-100	98-100	50-100	50-100	25-38	NP-13
	12-15	Silt loam, very fine sandy loam	ML	A-4	0	0-5	98-100	98-100	50-100	50-100	31-38	6-14
	15-24	Very fine sandy loam, silt loam	ML	A-4	0	0-5	98-100	98-100	50-100	50-100	25-38	NP-13
	24-30	Stratified silt loam to silty clay loam	ML, CL	A-6	0	0-5	98-100	98-100	60-100	60-100	38-55	15-35
	30-80	Stratified very fine sandy loam to silt loam to silt	ML, CL	A-4	0	0-5	98-100	98-100	50-100	40-100	25-38	NP-13
Gogebic, sandy substratum----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Sandy loam, cobbly very fine sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Cobbly very fine sandy loam, sandy loam, silt loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Sandy loam, gravelly fine sandy loam, cobbly very fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
296D: (Gogebic)	12-20	Very fine sandy loam, cobbly sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Gravelly fine sandy loam, cobbly loamy very fine sand, sandy loam, loamy sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Fine sandy loam, gravelly loamy fine sand, loamy fine sand, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	49-54	Gravelly loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Fine sandy loam, cobbly sandy loam, gravelly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sand, gravelly sand	SP, SP-SM	A-2-4, A-3	0-15	0-30	85-100	55-95	35-70	0-40	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
299B: Zandi-----	0-0.5	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	NP
	0.5-4	Loamy very fine sand, loamy fine sand	SM, ML	A-2-4, A-4	0	0	95-100	90-100	55-100	10-65	0-25	NP-7
	4-6	Loamy very fine sand, loamy fine sand	SM, ML	A-2-4, A-4	0	0	95-100	90-100	55-100	10-65	0-25	NP-7
	6-34	Fine sandy loam, very fine sandy loam	SM, ML	A-4	0	0	95-100	90-100	60-100	20-70	0-28	NP-9
	34-42	Stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam	ML, SM	A-2-4, A-4	0	0	100	100	50-100	30-80	0-30	NP-11
	42-57	Stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam	SM, ML	A-4, A-2-4	0	0	100	100	60-100	25-70	0-25	NP-7
	57-80	Stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam	SM, ML	A-2-4, A-4	0	0	100	100	60-100	25-70	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
299B: Amasa-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-4	Gravelly very fine sandy loam, silt loam, cobbly fine sandy loam			0-3	0-50	58-100	55-100	50-100	40-90	20-30	5-12
	4-7	Gravelly loam, gravelly very fine sandy loam, gravelly fine sandy loam, silt loam	CL-ML	A-4	0-3	0-50	58-100	55-100	50-100	40-90	20-30	5-12
	7-23	Gravelly loam, gravelly silt loam, gravelly fine sandy loam, very fine sandy loam	CL-ML	A-4	0-3	0-50	53-100	50-100	45-100	15-80	22-33	6-14
	23-28	Gravelly very fine sandy loam, gravelly loam, fine sandy loam, gravelly silt loam	SC-SM	A-4	0-3	0-50	58-100	55-100	30-90	10-70	22-33	6-14
	28-41	Sand, gravelly coarse sand	SP-SM, SP, SM, GM	A-2-4, A-1-b, A-1-a	0-8	0-50	27-100	25-100	0-90	0-40	12-21	NP-5
	41-80	Gravelly coarse sand, gravelly sand, very gravelly sand	GM, SP-SM	A-1-b, A-2-4, A-1-a	0-8	0-50	26-100	25-100	0-90	0-40	12-21	NP-5

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
299B: Flintsteel-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-5	Silt loam	CL, CH	A-7-6, A-6	0	0-3	95-100	90-100	85-100	55-95	35-66	15-39
	5-9	Loam, fine sandy loam, silt loam	ML	A-4	0	0-8	95-100	85-100	55-95	40-80	0-21	NP-4
	9-12	Loam, fine sandy loam, silt loam	CL-ML, CL, ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	20-34	3-14
	12-16	Fine sandy loam, silt loam, loam	CL, CL-ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	21-34	4-14
	16-22	Silt loam, fine sandy loam, loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	80-100	50-95	35-80	21-36	4-15
	22-36	Clay loam, loam, silt loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	25-37	7-16
	36-48	Loam, silt loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	21-30	4-11
	48-80	Silt loam, loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-90	21-30	4-11
299C: Zandi-----	0-0.5	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	NP
	0.5-4	Loamy fine sand, loamy very fine sand	SM, ML	A-2-4, A-4	0	0	95-100	90-100	55-100	10-65	0-25	NP-7
	4-6	Loamy fine sand, loamy very fine sand	SM, ML	A-2-4, A-4	0	0	95-100	90-100	55-100	10-65	0-25	NP-7
	6-34	Fine sandy loam, very fine sandy loam	SM, ML	A-4	0	0	95-100	90-100	60-100	20-70	0-28	NP-9
	34-42	Stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam	ML, SM	A-2-4, A-4	0	0	100	100	50-100	30-80	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
299C: (Zandi)	42-57	Stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam	SM, ML	A-4, A-2-4	0	0	100	100	60-100	25-70	0-25	NP-7
	57-80	Stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam	SM, ML	A-2-4, A-4	0	0	100	100	60-100	25-70	0-25	NP-7
Amasa-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-4	Cobbly fine sandy loam, silt loam, gravelly very fine sandy loam			0-3	0-50	58-100	55-100	50-100	40-90	20-30	5-12
	4-7	Gravelly fine sandy loam, gravelly loam, gravelly very fine sandy loam, silt loam	CL-ML	A-4	0-3	0-50	58-100	55-100	50-100	40-90	20-30	5-12
	7-23	Gravelly loam, gravelly silt loam, gravelly fine sandy loam, very fine sandy loam	CL-ML	A-4	0-3	0-50	53-100	50-100	45-100	15-80	22-33	6-14
	23-28	Gravelly very fine sandy loam, gravelly loam, gravelly silt loam, fine sandy loam	SC-SM	A-4	0-3	0-50	58-100	55-100	30-90	10-70	22-33	6-14

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
299C: (Amasa)	28-41	Sand, gravelly coarse sand	SP-SM, SP, SM, GM	A-2-4, A-1-b, A-1-a	0-8	0-50	27-100	25-100	0-90	0-40	12-21	NP-5
	41-80	Gravelly coarse sand, gravelly sand, very gravelly sand	GM, SP-SM	A-1-b, A-2-4, A-1-a	0-8	0-50	26-100	25-100	0-90	0-40	12-21	NP-5
Flintsteel-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-5	Silt loam	CL, CH	A-7-6, A-6	0	0-3	95-100	90-100	85-100	55-95	35-66	15-39
	5-9	Loam, fine sandy loam, silt loam	ML	A-4	0	0-8	95-100	85-100	55-95	40-80	0-21	NP-4
	9-12	Loam, fine sandy loam, silt loam	CL-ML, CL, ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	20-34	3-14
	12-16	Fine sandy loam, loam, silt loam	CL, CL-ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	21-34	4-14
	16-22	Silt loam, fine sandy loam, loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	80-100	50-95	35-80	21-36	4-15
	22-36	Clay loam, loam, silt loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	25-37	7-16
	36-48	Loam, silt loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	21-30	4-11
	48-80	Silt loam, loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-90	21-30	4-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
					4	10	40	200				
	In				Pct	Pct					Pct	
301A: Moodig-----	0-4	Loam	CL	A-4	0	0-22	53-100	50-96	42-75	25-50	22-47	3-18
	4-9	Gravelly sandy loam, sandy loam, loam, gravelly loam, fine sandy loam	SC-SM	A-4	0	0-19	53-100	50-96	37-86	10-68	0-41	NP-19
	9-11	Gravelly sandy loam, fine sandy loam, gravelly loam, loam, sandy loam	CL-ML	A-4	0	0-19	44-96	44-96	33-96	21-73	0-43	NP-18
	11-18	Sandy loam, fine sandy loam, gravelly loam, gravelly sandy loam, loam	SC-SM	A-4	0	0-22	53-100	50-96	37-86	10-68	0-44	NP-19
	18-25	Sandy loam, loam, gravelly sandy loam, gravelly loam, fine sandy loam	SC-SM	A-4	0	0-22	53-100	50-96	37-86	10-68	0-43	NP-18
	25-30	Stratified sandy loam to loam	SC	A-4	0	0-22	53-100	50-96	42-75	25-50	0-38	NP-19
	30-35	Loamy sand, gravelly fine sandy loam, fine sandy loam, gravelly loamy sand, gravelly sandy loam, sandy loam	SM	A-4	0	0-22	58-100	55-96	37-92	10-50	0-32	NP-13

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
301A: (Moodig)	35-47	Fine sandy loam, gravelly sandy loam, sandy loam, loam, gravelly loamy sand, loamy sand, gravelly fine sandy loam	CL	A-4	0	0-22	53-100	50-96	42-75	25-50	0-38	NP-19
	47-57	Gravelly sandy loam, sandy loam	SC-SM	A-2-4	0	0-22	58-100	55-96	37-92	10-50	0-32	NP-13
	57-63	Sandy loam, gravelly sandy loam, loam	CL	A-4	0	0-18	53-100	50-96	42-70	25-50	0-38	NP-19
	63-71	Gravelly sandy loam, sandy loam, loamy sand	SM	A-2-4	0	0-22	53-100	50-100	25-90	5-50	0-32	NP-13

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
302B: Manitowish-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-4	Sandy loam, gravelly fine sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	4-5	Gravelly fine sandy loam, sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	5-11	Sandy loam, gravelly fine sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	11-22	Sandy loam, gravelly fine sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	22-40	Coarse sand, loamy coarse sand, gravelly loamy sand	SM	A-1-b, A-2-4	0	0-15	75-100	50-100	5-60	5-25	0-26	NP-9
	40-80	Coarse sand, gravelly sand	SP-SM, SW-SM	A-1-b, A-3	0	0-15	75-100	50-100	0-60	0-25	0-20	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
302C: Manitowish-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-4	Sandy loam, gravelly fine sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	4-5	Sandy loam, gravelly fine sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	5-11	Sandy loam, gravelly fine sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	11-22	Sandy loam, gravelly fine sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	22-40	Loamy coarse sand, coarse sand, gravelly loamy sand	SM	A-1-b, A-2-4	0	0-15	75-100	50-100	5-60	5-25	0-26	NP-9
	40-80	Coarse sand, gravelly sand	SP-SM, SW-SM	A-1-b, A-3	0	0-15	75-100	50-100	0-60	0-25	0-20	NP-4
	303: Bowstring-----	0-13	Muck	PT	A-8	0	0	100	100	100	100	---
13-15		Silt loam, loamy sand, sand, highly decomposed plant material	CL-ML	A-4	0	0	74-100	70-100	35-100	35-100	0-38	NP-19
15-32		Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
32-36		Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
36-42		Fine sandy loam, sand, fine sand, loamy sand	SC-SM	A-4	0	0	74-100	70-100	40-90	10-70	0-32	NP-13
42-80		Loamy sand, fine sand, gravelly coarse sand, sand	SM	A-1	0	0	74-100	70-100	0-75	0-40	0-27	NP-10

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
303: Arnheim-----	0-5	Mucky silt loam, very fine sandy loam, loamy very fine sand, silt loam	SM, CL-ML, ML	A-4	0	0	100	95-100	60-100	30-90	0-28	NP-9
	5-10	Very fine sandy loam, silt loam	CL-ML, ML, SM	A-4	0	0	100	95-100	60-100	30-90	0-28	NP-9
	10-80	Stratified very fine sandy loam to silt loam to loamy fine sand to fine sandy loam	CL-ML, ML, SM	A-4	0	0	100	95-100	60-100	30-90	0-28	NP-9
305B: Keweenaw-----	0-2	Highly decomposed plant material	PT	A-8	0-7	0-10	100	100	100	100	---	NP
	2-4	Loamy fine sand, gravelly loamy sand, loamy sand	SM	A-2-4	0-7	0-10	80-100	75-100	50-80	15-45	0-21	NP-4
	4-6	Gravelly loamy fine sand, loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	50-80	15-45	0-21	NP-4
	6-25	Gravelly loamy fine sand, loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	70-80	15-45	0-21	NP-4
	25-45	Stratified sand to fine sand to loamy fine sand to loamy very fine sand	SM	A-2-4	0-5	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	45-56	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-5	0-7	80-100	75-100	60-95	15-50	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
305B: (Keweenaw)	56-71	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-3	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	71-90	Stratified loamy fine sand to fine sandy loam	ML, SM	A-2-4	0-3	0-5	80-100	75-100	60-80	15-50	0-21	NP-4
Siskiwit-----	0-2	Highly decomposed plant material	PT	A-8	0	0-50	100	100	100	100	---	NP
	2-8	Gravelly sandy loam, loamy sand, cobbly loamy sand	ML, SM	A-4, A-2-4	0	0-50	60-100	55-100	50-95	10-50	0-33	NP-12
	8-11	Loamy fine sand, cobbly sandy loam, gravelly loamy sand	ML, SM	A-2-4, A-4	0	0-50	60-100	55-100	50-95	10-50	0-36	NP-9
	11-28	Gravelly sandy loam, cobbly loamy sand, loamy fine sand	ML, SM	A-4, A-2-4	0	0	60-100	55-100	50-95	10-50	0-32	NP-9
	28-34	Loamy sand, gravelly loamy fine sand, cobbly sandy loam	SM	A-2-4, A-4	0	0-50	60-100	60-100	30-75	10-40	0-26	NP-9
	34-55	Cobbly loamy fine sand, gravelly sandy loam, sand, loamy sand, sand, loamy sand, fine sandy loam	SM	A-2-4, A-4	0	0-50	60-100	60-100	30-95	10-40	0-26	NP-9
	55-80	Stratified gravelly sand to sand to loamy sand	SM, SP-SM, SP	A-2-4, A-3	0	0-50	60-100	60-100	20-75	0-35	0-21	NP-6

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
305C: Keweenaw-----	0-2	Highly decomposed plant material	PT	A-8	0-7	0-10	100	100	100	100	---	NP
	2-4	Gravelly loamy sand, loamy sand, loamy fine sand	SM	A-2-4	0-7	0-10	80-100	75-100	50-80	15-45	0-21	NP-4
	4-6	Loamy fine sand, gravelly loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	50-80	15-45	0-21	NP-4
	6-25	Loamy fine sand, gravelly loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	70-80	15-45	0-21	NP-4
	25-45	Stratified sand to fine sand to loamy fine sand to loamy very fine sand	SM	A-2-4	0-5	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	45-56	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-5	0-7	80-100	75-100	60-95	15-50	0-21	NP-4
	56-71	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-3	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	71-90	Stratified loamy fine sand to fine sandy loam	ML, SM	A-2-4	0-3	0-5	80-100	75-100	60-80	15-50	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
305C: Siskiwit-----	0-2	Highly decomposed plant material	PT	A-8	0	0-50	100	100	100	100	---	NP
	2-8	Loamy sand, cobbly loamy sand, gravelly sandy loam	ML, SM	A-4, A-2-4	0	0-50	60-100	55-100	50-95	10-50	0-33	NP-12
	8-11	Loamy fine sand, cobbly sandy loam, gravelly loamy sand	ML, SM	A-2-4, A-4	0	0-50	60-100	55-100	50-95	10-50	0-36	NP-9
	11-28	Cobbly loamy sand, gravelly sandy loam, loamy fine sand	ML, SM	A-2-4, A-4	0	0	60-100	55-100	50-95	10-50	0-32	NP-9
	28-34	Cobbly sandy loam, loamy sand, gravelly loamy fine sand	SM	A-2-4, A-4	0	0-50	60-100	60-100	30-75	10-40	0-26	NP-9
	34-55	Sand, loamy sand, fine sandy loam, gravelly sandy loam, cobbly loamy fine sand, sand, loamy sand	SM	A-2-4, A-4	0	0-50	60-100	60-100	30-95	10-40	0-26	NP-9
	55-80	Stratified gravelly sand to sand to loamy sand	SM, SP-SM, SP	A-2-4, A-3	0	0-50	60-100	60-100	20-75	0-35	0-21	NP-6
307: Lupton-----	0-20	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	20-80	Muck	PT	A-8	0	0	100	100	90-100	40-100	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
307: Cathro-----	0-6	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	6-31	Muck	PT	A-8	0	0	100	90-100	90-100	40-100	---	NP
	31-80	Silt loam, silty clay loam, fine sandy loam, loam, sandy loam, very fine sandy loam	CL-ML, ML, SM, SC-SM, CL	A-4, A-6	0	0-10	85-100	65-100	50-85	30-55	16-39	1-18
309: Cathro-----	0-6	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	6-31	Muck	PT	A-8	0	0	100	90-100	90-100	40-100	---	NP
	31-80	Fine sandy loam, silt loam, very fine sandy loam, loam, sandy loam, silty clay loam	CL, SC-SM, SM, ML, CL- ML	A-6, A-4	0	0-10	85-100	65-100	50-85	30-55	16-39	1-18

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
310B: Gogebic-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Fine sandy loam, cobbly very fine sandy loam, sandy loam, gravelly silt loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Silt loam, gravelly fine sandy loam, cobbly very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, cobbly sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Gravelly fine sandy loam, loamy sand, sandy loam, cobbly loamy very fine sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Gravelly loamy fine sand, fine sandy loam, loamy fine sand, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
310B: (Gogebic)	49-54	Gravelly loam, fine sandy loam, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Fine sandy loam, gravelly sandy loam, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Gravelly fine sandy loam, cobbly sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
310C: Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Fine sandy loam, gravelly silt loam, cobbly very fine sandy loam, sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Cobbly very fine sandy loam, silt loam, sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Cobbly very fine sandy loam, sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
310C: (Gogebic)	12-20	Very fine sandy loam, cobbly sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam, loamy sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Cobbly sandy loam, loamy fine sand, gravelly loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	49-54	Fine sandy loam, gravelly loam, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Cobbly sandy loam, gravelly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sandy loam, gravelly fine sandy loam, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
310D: Gogebic-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Fine sandy loam, sandy loam, cobbly very fine sandy loam, gravelly silt loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Sandy loam, silt loam, gravelly fine sandy loam, cobbly very fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Silt loam, gravelly fine sandy loam, cobbly very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Gravelly silt loam, cobbly sandy loam, fine sandy loam, very fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Gravelly fine sandy loam, loamy sand, sandy loam, cobbly loamy very fine sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Gravelly loamy fine sand, loamy fine sand, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
310D: (Gogebic)	In				Pct	Pct					Pct	
	49-54	Cobbly sandy loam, fine sandy loam, gravelly loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Fine sandy loam, cobbly sandy loam, gravelly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Gravelly fine sandy loam, cobbly sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
310E: Schweitzer-----	0-1	Cobbly very fine sandy loam, cobbly silt loam, fine sandy loam	ML, SM, CL-ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	1-5	Fine sandy loam, cobbly silt loam, cobbly very fine sandy loam	ML, SM, CL-ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	5-8	Cobbly very fine sandy loam, fine sandy loam, cobbly silt loam	ML, SM, CL-ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	8-21	Cobbly very fine sandy loam, cobbly silt loam, fine sandy loam	ML, SM, CL-ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
310E: (Schweitzer)	21-27	Gravelly fine sandy loam, very gravelly loamy fine sand, very cobbly loamy sand, cobbly sandy loam	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	27-43	Very cobbly sandy loam, cobbly loamy sand, gravelly fine sandy loam, very gravelly loamy fine sand	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	43-61	Very cobbly sandy loam, gravelly fine sandy loam, cobbly loamy sand, very gravelly loamy fine sand	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	61-80	Very cobbly loamy sand, very gravelly fine sandy loam, cobbly sandy loam	SM, SC-SM	A-4, A-2-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
311B: Tula-----	In				Pct	Pct					Pct	
	0-1	Highly decomposed plant material	PT	A-8	0-7	0-30	100	100	100	100	---	NP
	1-5	Cobbly very fine sandy loam, fine sandy loam	CL-ML, ML, SM	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	5-8	Cobbly very fine sandy loam, fine sandy loam	CL-ML, SM, ML	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	8-20	Cobbly very fine sandy loam, fine sandy loam	CL-ML, SM, ML	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	20-28	Gravelly sandy loam, fine sandy loam	ML, CL-ML, SM	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	28-37	Fine sandy loam, gravelly loam, gravelly sandy loam, loamy sand	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-28	NP-9
	37-62	Fine sandy loam, gravelly sandy loam, gravelly loam, gravelly loamy sand	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-30	NP-11
	62-80	Fine sandy loam, gravelly sandy loam	ML, SC-SM, SM	A-4	0-7	1-23	85-100	65-92	40-80	20-55	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
311B: Gogebic-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Gravelly fine sandy loam, silt loam, sandy loam, cobbly very fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Cobbly sandy loam, very fine sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Fine sandy loam, cobbly sandy loam, gravelly loamy fine sand, loamy fine sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
311B: (Gogebic)	49-54	Cobbly sandy loam, gravelly loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Fine sandy loam, cobbly sandy loam, gravelly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Gravelly fine sandy loam, cobbly sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
312A: Tula-----	0-1	Highly decomposed plant material	PT	A-8	0-7	0-30	100	100	100	100	---	NP
	1-5	Fine sandy loam, cobbly very fine sandy loam	CL-ML, ML, SM	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	5-8	Cobbly very fine sandy loam, fine sandy loam	CL-ML, SM, ML	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	8-20	Cobbly very fine sandy loam, fine sandy loam	CL-ML, SM, ML	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	20-28	Fine sandy loam, gravelly sandy loam	ML, CL-ML, SM	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	28-37	Gravelly sandy loam, fine sandy loam, gravelly loam, loamy sand	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-28	NP-9
	37-62	Gravelly loamy sand, gravelly loam, gravelly sandy loam, fine sandy loam	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
312A: (Tula)	In											
	62-80	Fine sandy loam, gravelly sandy loam	ML, SC-SM, SM	A-4	0-7	1-23	85-100	65-92	40-80	20-55	0-28	NP-9
Foxpaw-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	---	---	NP
	1-3	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	3-8	Cobbly loam, sandy loam	CL-ML, ML, SM	A-4	0	2-30	74-100	70-94	35-94	35-84	0-30	2-11
	8-15	Sandy loam, gravelly sandy loam, cobbly fine sandy loam	SM, CL-ML, ML	A-4	0	2-30	74-100	70-94	40-84	10-67	0-30	NP-11
	15-23	Sandy loam, gravelly fine sandy loam, gravelly sandy loam	SM, CL-ML, ML	A-4	0	2-30	74-100	70-94	40-84	10-67	0-30	NP-11
	23-32	Loam, gravelly sandy loam, sandy loam	SM, CL-ML, ML	A-4	0	2-30	74-100	70-94	40-84	10-67	0-30	NP-11
	32-80	Loam, sandy loam, fine sandy loam, gravelly sandy loam, gravelly loam	SM, CL-ML, ML	A-4	0	2-30	74-100	70-94	40-84	10-67	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
312A: Gay-----	0-4	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	4-7	Fine sandy loam, mucky sandy loam, cobbly sandy loam, loamy sand	SM	A-2-4, A-4	0-24	0-15	90-100	75-100	35-80	10-50	0-21	NP-4
	7-11	Loamy sand, sandy loam, cobbly sandy loam	SM	A-2-4, A-4	0-24	0-15	90-100	75-100	35-75	10-40	0-21	NP-4
	11-16	Sandy loam, fine sandy loam	SM, SC-SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-28	2-9
	16-30	Fine sandy loam, sandy loam	SM, SC-SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-25	2-7
	30-80	Sandy loam, fine sandy loam	SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-23	2-6
316: Gay-----	0-7	Fine sandy loam, loam, sandy loam	CL-ML, CL, ML	A-4	0-24	0-15	90-100	75-100	50-90	30-70	0-30	NP-11
	7-11	Sandy loam, loamy sand, cobbly sandy loam	SM	A-2-4, A-4	0-24	0-15	90-100	75-100	35-75	10-40	0-21	NP-4
	11-16	Fine sandy loam, sandy loam	SM, SC-SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-28	2-9
	16-30	Fine sandy loam, sandy loam	SM, SC-SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-25	2-7
	30-80	Sandy loam, fine sandy loam	SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-23	2-6

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
317B: Gogebic-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Silt loam, cobbly very fine sandy loam, sandy loam, gravelly fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Cobbly very fine sandy loam, sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Gravelly silt loam, very fine sandy loam, fine sandy loam, cobbly sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Sandy loam, loamy sand, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Cobbly sandy loam, loamy fine sand, gravelly loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
317B: (Gogebic)	In				Pct	Pct					Pct	
	49-54	Gravelly loam, cobble sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Fine sandy loam, gravelly sandy loam, cobble sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Gravelly fine sandy loam, cobble sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
317C: Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Sandy loam, silt loam, gravelly fine sandy loam, cobble very fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Gravelly fine sandy loam, silt loam, cobble very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Sandy loam, cobble very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
317C: (Gogebic)	12-20	Fine sandy loam, gravelly silt loam, cobbly sandy loam, very fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Cobbly sandy loam, loamy fine sand, gravelly loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	49-54	Fine sandy loam, cobbly sandy loam, gravelly loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Cobbly sandy loam, fine sandy loam, gravelly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sandy loam, cobbly sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
317D: Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Gravelly fine sandy loam, silt loam, cobbly very fine sandy loam, sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, cobbly sandy loam, fine sandy loam, gravelly silt loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam, loamy sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Cobbly sandy loam, loamy fine sand, gravelly loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
317D: (Gogebic)	In				Pct	Pct					Pct	
	49-54	Fine sandy loam, gravelly loam, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Fine sandy loam, gravelly sandy loam, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Gravelly fine sandy loam, cobbly sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
319B: McMillan-----	0-1	Moderately decomposed plant material	PT	A-8	0	0-7	95-100	85-100	85-100	40-80	---	NP
	1-2	Fine sandy loam	SM, ML	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-60	0-21	NP-4
	2-5	Fine sandy loam	SM	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	5-9	Fine sandy loam, very fine sandy loam	SM	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	9-14	Fine sandy loam, very fine sandy loam	SM	A-2-4, A-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	14-19	Loamy sand, loamy fine sand, fine sandy loam	SM	A-2-4, A-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	19-29	Fine sand, loamy fine sand, loamy sand	SP-SM, SM	A-2, A-2-4	0	0-7	95-100	85-100	70-90	10-30	0-16	NP-0
	29-72	Stratified sand to loamy fine sand	SM, SP-SM	A-2, A-2-4	0	0-7	95-100	85-100	70-90	10-30	0-16	NP-0
	72-80	Sand, stratified coarse sand to sand to loamy sand	SP-SM, SP	A-3, A-2-4	0	0-7	95-100	85-100	60-90	1-20	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
319B: Noseum-----	0-1	Highly decomposed plant material	PT	A-8	0	0-7	100	100	100	100	---	NP
	1-4	Fine sandy loam, sandy loam	SC-SM, ML, SM	A-4	0	0-7	95-100	90-100	55-85	10-70	0-25	NP-7
	4-6	Fine sandy loam, sandy loam	SC-SM, ML, SM	A-4	0	0-7	95-100	90-100	55-85	10-70	0-25	NP-7
	6-14	Sandy loam, fine sandy loam	SC-SM, ML, SM	A-4	0	0-7	95-100	90-100	55-85	10-70	0-25	NP-7
	14-24	Sand, loamy fine sand, loamy sand	SP-SM, SM	A-4, A-2-4	0	0-7	95-100	90-100	45-75	10-50	0-21	NP-4
	24-37	Sand, fine sand	SP, SM, SP-SM	A-2-4, A-3	0	0-7	95-100	90-100	45-75	0-35	---	NP
	37-63	Sand, fine sand	SM, SP, SP-SM	A-2-4, A-3	0	0-7	95-100	90-100	45-75	0-35	---	NP
	63-80	Fine sand, sand	SP, SM, SP-SM	A-2-4, A-3	0	0-7	95-100	90-100	45-75	0-35	---	NP
319C: McMillan-----	0-1	Moderately decomposed plant material	PT	A-8	0	0-7	95-100	85-100	85-100	40-80	---	NP
	1-2	Fine sandy loam	SM, ML	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-60	0-21	NP-4
	2-5	Fine sandy loam	SM	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	5-9	Very fine sandy loam, fine sandy loam	SM	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	9-14	Fine sandy loam, very fine sandy loam	SM	A-2-4, A-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	14-19	Fine sandy loam, loamy fine sand, loamy sand	SM	A-2-4, A-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	19-29	Loamy fine sand, loamy sand, fine sand	SP-SM, SM	A-2, A-2-4	0	0-7	95-100	85-100	70-90	10-30	0-16	NP-0
	29-72	Stratified sand to loamy fine sand	SM, SP-SM	A-2, A-2-4	0	0-7	95-100	85-100	70-90	10-30	0-16	NP-0
	72-80	Stratified coarse sand to sand to loamy sand, sand	SP-SM, SP	A-3, A-2-4	0	0-7	95-100	85-100	60-90	1-20	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
319C: Islandlake-----	0-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-7	Sand, loamy sand	SP-SM, SP, SM	A-2-4, A-3	0	0-5	95-100	75-100	40-90	0-40	---	NP
	7-9	Loamy sand, sand	SP, SP-SM, SM	A-2-4, A-3	0	0-5	95-100	75-100	40-90	0-40	---	NP
	9-35	Sand	SM, SP, SP-SM	A-2-4, A-3	0	0-5	95-100	75-100	25-90	0-30	---	NP
	35-45	Sand	SM, SP, SP-SM	A-2-4, A-3	0	0-5	95-100	75-100	25-90	0-30	---	NP
	45-80	Stratified sand to loamy sand	SM, SP, SP-SM	A-2-4, A-3	0	0-5	95-100	75-100	10-90	0-40	---	NP
319D: McMillan-----	0-1	Moderately decomposed plant material	PT	A-8	0	0-7	95-100	85-100	85-100	40-80	---	NP
	1-2	Fine sandy loam	SM, ML	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-60	0-21	NP-4
	2-5	Fine sandy loam	SM	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	5-9	Fine sandy loam, very fine sandy loam	SM	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	9-14	Very fine sandy loam, fine sandy loam	SM	A-2-4, A-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	14-19	Fine sandy loam, loamy fine sand, loamy sand	SM	A-2-4, A-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	19-29	Fine sand, loamy fine sand, loamy sand	SP-SM, SM	A-2, A-2-4	0	0-7	95-100	85-100	70-90	10-30	0-16	NP-0
	29-72	Stratified sand to loamy fine sand	SM, SP-SM	A-2, A-2-4	0	0-7	95-100	85-100	70-90	10-30	0-16	NP-0
	72-80	Sand, stratified coarse sand to sand to loamy sand	SP-SM, SP	A-3, A-2-4	0	0-7	95-100	85-100	60-90	1-20	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
319D: Islandlake-----	0-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-7	Sand, loamy sand	SP-SM, SP, SM	A-2-4, A-3	0	0-5	95-100	75-100	40-90	0-40	---	NP
	7-9	Sand, loamy sand	SP, SP-SM, SM	A-2-4, A-3	0	0-5	95-100	75-100	40-90	0-40	---	NP
	9-35	Sand	SM, SP, SP-SM	A-2-4, A-3	0	0-5	95-100	75-100	25-90	0-30	---	NP
	35-45	Sand	SM, SP, SP-SM	A-2-4, A-3	0	0-5	95-100	75-100	25-90	0-30	---	NP
	45-80	Stratified sand to loamy sand	SM, SP, SP-SM	A-2-4, A-3	0	0-5	95-100	75-100	10-90	0-40	---	NP
319E: McMillan-----	0-1	Moderately decomposed plant material	PT	A-8	0	0-7	95-100	85-100	85-100	40-80	---	---
	1-2	Fine sandy loam	SM, ML	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-60	0-21	NP-4
	2-5	Fine sandy loam	SM	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	5-9	Fine sandy loam, very fine sandy loam	SM	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	9-14	Very fine sandy loam, fine sandy loam	SM	A-2-4, A-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	14-19	Loamy fine sand, fine sandy loam, loamy sand	SM	A-2-4, A-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	19-29	Fine sand, loamy sand, loamy fine sand	SP-SM, SM	A-2, A-2-4	0	0-7	95-100	85-100	70-90	10-30	0-16	NP-0
	29-72	Stratified sand to loamy fine sand	SM, SP-SM	A-2, A-2-4	0	0-7	95-100	85-100	70-90	10-30	0-16	NP-0
	72-80	Stratified coarse sand to sand to loamy sand, sand	SP-SM, SP	A-3, A-2-4	0	0-7	95-100	85-100	60-90	1-20	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
319E: Islandlake-----	0-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-7	Loamy sand, sand	SP-SM, SP, SM	A-2-4, A-3	0	0-5	95-100	75-100	40-90	0-30	---	NP
	7-9	Loamy sand, sand	SP, SP-SM, SM	A-2-4, A-3	0	0-5	95-100	75-100	40-90	0-30	---	NP
	9-35	Sand	SM, SP, SP-SM	A-2-4, A-3	0	0-5	95-100	75-100	25-90	0-40	---	NP
	35-45	Sand	SM, SP, SP-SM	A-2-4, A-3	0	0-5	95-100	75-100	25-90	0-40	---	NP
	45-80	Stratified sand to loamy sand	SM, SP, SP-SM	A-2-4, A-3	0	0-5	95-100	75-100	10-90	0-40	---	NP
322B: Stutts-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-6	Sandy loam, loamy fine sand, fine sandy loam	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	6-8	Sandy loam, fine sandy loam, loamy fine sand	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	8-15	Fine sand, loamy fine sand, sandy loam, fine sandy loam	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-25	NP-4
	15-18	Fine sandy loam, sandy loam, loamy fine sand, fine sand	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-21	NP-4
	18-28	Sand, fine sand	SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	---	NP
	28-80	Sand, fine sand	SP-SM	A-3	0	0	92-100	85-100	70-95	8-30	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
322B: Keweenaw-----	0-2	Highly decomposed plant material	PT	A-8	0-7	0-10	100	100	100	100	---	NP
	2-4	Loamy fine sand, gravelly loamy sand, loamy sand	SM	A-2-4	0-7	0-10	80-100	75-100	50-80	15-45	0-21	NP-4
	4-6	Gravelly loamy fine sand, loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	50-80	15-45	0-21	NP-4
	6-25	Gravelly loamy fine sand, loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	70-80	15-45	0-21	NP-4
	25-45	Stratified sand to fine sand to loamy fine sand to loamy very fine sand	SM	A-2-4	0-5	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	45-56	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-5	0-7	80-100	75-100	60-95	15-50	0-21	NP-4
	56-71	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-3	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	71-90	Stratified loamy fine sand to fine sandy loam	ML, SM	A-2-4	0-3	0-5	80-100	75-100	60-80	15-50	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
322C: Stutts-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-6	Sandy loam, loamy fine sand, fine sandy loam	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	6-8	Fine sandy loam, sandy loam, loamy fine sand	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	8-15	Sandy loam, fine sand, loamy fine sand, fine sandy loam	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-25	NP-4
	15-18	Fine sandy loam, sandy loam, loamy fine sand, fine sand	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-21	NP-4
	18-28	Fine sand, sand	SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	---	NP
	28-80	Sand, fine sand	SP-SM	A-3	0	0	92-100	85-100	70-95	8-30	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
322C: Keweenaw-----	0-2	Highly decomposed plant material	PT	A-8	0-7	0-10	100	100	100	100	---	NP
	2-4	Loamy fine sand, gravelly loamy sand, loamy sand	SM	A-2-4	0-7	0-10	80-100	75-100	50-80	15-45	0-21	NP-4
	4-6	Loamy fine sand, gravelly loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	50-80	15-45	0-21	NP-4
	6-25	Loamy fine sand, gravelly loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	70-80	15-45	0-21	NP-4
	25-45	Stratified sand to fine sand to loamy fine sand to loamy very fine sand	SM	A-2-4	0-5	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	45-56	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-5	0-7	80-100	75-100	60-95	15-50	0-21	NP-4
	56-71	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-3	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	71-90	Stratified loamy fine sand to fine sandy loam	ML, SM	A-2-4	0-3	0-5	80-100	75-100	60-80	15-50	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
322D: Stutts-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-6	Sandy loam, loamy fine sand, fine sandy loam	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	6-8	Sandy loam, fine sandy loam, loamy fine sand	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	8-15	Sandy loam, loamy fine sand, fine sand, fine sandy loam	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-25	NP-4
	15-18	Fine sandy loam, fine sand, loamy fine sand, sandy loam	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-21	NP-4
	18-28	Sand, fine sand	SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	---	NP
	28-80	Fine sand, sand	SP-SM	A-3	0	0	92-100	85-100	70-95	8-30	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
322D: Keweenaw-----	0-2	Highly decomposed plant material	PT	A-8	0-7	0-10	100	100	100	100	---	NP
	2-4	Loamy sand, loamy fine sand, gravelly loamy sand	SM	A-2-4	0-7	0-10	80-100	75-100	50-80	15-45	0-21	NP-4
	4-6	Loamy fine sand, gravelly loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	50-80	15-45	0-21	NP-4
	6-25	Gravelly loamy fine sand, loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	70-80	15-45	0-21	NP-4
	25-45	Stratified sand to fine sand to loamy fine sand to loamy very fine sand	SM	A-2-4	0-5	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	45-56	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-5	0-7	80-100	75-100	60-95	15-50	0-21	NP-4
	56-71	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-3	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	71-90	Stratified loamy fine sand to fine sandy loam	ML, SM	A-2-4	0-3	0-5	80-100	75-100	60-80	15-50	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
323B: Keweenaw-----	0-2	Highly decomposed plant material	PT	A-8	0	0	0	0	0	0	---	---
	2-4	Sandy loam, loamy sand	SM, SC-SM	A-2-4	0	0	95-100	95-100	50-75	15-30	0-66	NP-41
	4-6	Loamy fine sand, gravelly loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	50-80	15-45	0-21	NP-4
	6-25	Loamy fine sand, gravelly loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	70-80	15-45	0-21	NP-4
	25-45	Stratified sand to fine sand to loamy fine sand to loamy very fine sand	SM	A-2-4	0-5	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	45-56	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-5	0-7	80-100	75-100	60-95	15-50	0-21	NP-4
	56-71	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-3	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	71-90	Stratified loamy fine sand to fine sandy loam	ML, SM	A-2-4	0-3	0-5	80-100	75-100	60-80	15-50	0-21	NP-4
Kalkaska-----	0-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-6	Sand, loamy sand	SP-SM, SP	A-3, A-2-4	0	0-5	95-100	90-100	50-85	0-15	---	NP
	6-8	Sand	SP, SP-SM	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	8-17	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	17-32	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	32-80	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
323C: Keweenaw-----	0-2	Highly decomposed plant material	PT	A-8	0	0	0	0	0	0	---	---
	2-4	Sandy loam, loamy sand	SM, SC-SM	A-2-4	0	0	95-100	95-100	50-75	15-30	0-66	NP-41
	4-6	Loamy fine sand, gravelly loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	50-80	15-45	0-21	NP-4
	6-25	Loamy fine sand, gravelly loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	70-80	15-45	0-21	NP-4
	25-45	Stratified sand to fine sand to loamy fine sand to loamy very fine sand	SM	A-2-4	0-5	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	45-56	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-5	0-7	80-100	75-100	60-95	15-50	0-21	NP-4
	56-71	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-3	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	71-90	Stratified loamy fine sand to fine sandy loam	ML, SM	A-2-4	0-3	0-5	80-100	75-100	60-80	15-50	0-21	NP-4
Kalkaska-----	0-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-6	Loamy sand, sand	SP-SM, SP	A-3, A-2-4	0	0-5	95-100	90-100	50-85	0-15	---	NP
	6-8	Sand	SP, SP-SM	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	8-17	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	17-32	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	32-80	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
323D: Keweenaw-----	0-2	Highly decomposed plant material	PT	A-8	0	0	0	0	0	0	---	---
	2-4	Sandy loam, loamy sand	SM, SC-SM	A-2-4	0	0	95-100	95-100	50-75	15-30	0-66	NP-41
	4-6	Loamy fine sand, gravelly loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	50-80	15-45	0-21	NP-4
	6-25	Loamy fine sand, gravelly loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	70-80	15-45	0-21	NP-4
	25-45	Stratified sand to fine sand to loamy fine sand to loamy very fine sand	SM	A-2-4	0-5	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	45-56	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-5	0-7	80-100	75-100	60-95	15-50	0-21	NP-4
	56-71	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-3	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	71-90	Stratified loamy fine sand to fine sandy loam	ML, SM	A-2-4	0-3	0-5	80-100	75-100	60-80	15-50	0-21	NP-4
Kalkaska-----	0-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-6	Sand, loamy sand	SP-SM, SP	A-3, A-2-4	0	0-5	95-100	90-100	50-85	0-15	---	NP
	6-8	Sand	SP, SP-SM	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	8-17	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	17-32	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	32-80	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
325B: Siskiwit-----	0-2	Highly decomposed plant material	PT	A-8	0	0-50	100	100	100	100	---	NP
	2-8	Cobbly loamy sand, gravelly sandy loam, loamy sand	ML, SM	A-4, A-2-4	0	0-50	60-100	55-100	50-95	10-50	0-33	NP-12
	8-11	Loamy fine sand, gravelly loamy sand, cobbly sandy loam	ML, SM	A-2-4, A-4	0	0-50	60-100	55-100	50-95	10-50	0-36	NP-9
	11-28	Loamy fine sand, cobbly loamy sand, gravelly sandy loam	ML, SM	A-2-4, A-4	0	0	60-100	55-100	50-95	10-50	0-32	NP-9
	28-34	Cobbly sandy loam, loamy sand, gravelly loamy fine sand	SM	A-2-4, A-4	0	0-50	60-100	60-100	30-75	10-40	0-26	NP-9
	34-55	Sand, loamy sand, fine sandy loam, cobbly loamy fine sand, sand, loamy sand, gravelly sandy loam	SM	A-2-4, A-4	0	0-50	60-100	60-100	30-95	10-40	0-26	NP-9
	55-80	Stratified gravelly sand to sand to loamy sand	SM, SP-SM, SP	A-2-4, A-3	0	0-50	60-100	60-100	20-75	0-35	0-21	NP-6

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
325B: Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Silt loam, cobbly very fine sandy loam, gravelly fine sandy loam, sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Silt loam, gravelly fine sandy loam, cobbly very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Cobbly very fine sandy loam, gravelly fine sandy loam, silt loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, gravelly silt loam, fine sandy loam, cobbly sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam, loamy sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Loamy fine sand, gravelly loamy fine sand, fine sandy loam, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
325B: (Gogebic)	In				Pct	Pct					Pct	
	49-54	Gravelly loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Cobbly sandy loam, fine sandy loam, gravelly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sandy loam, cobbly sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
325C: Siskiwit-----	0-2	Highly decomposed plant material	PT	A-8	0	0-50	100	100	100	100	---	NP
	2-8	Gravelly sandy loam, cobbly loamy sand, loamy sand	ML, SM	A-4, A-2-4	0	0-50	60-100	55-100	50-95	10-50	0-33	NP-12
	8-11	Gravelly loamy sand, cobbly sandy loam, loamy fine sand	ML, SM	A-2-4, A-4	0	0-50	60-100	55-100	50-95	10-50	0-36	NP-9
	11-28	Cobbly loamy sand, loamy fine sand, gravelly sandy loam	ML, SM	A-2-4, A-4	0	0	60-100	55-100	50-95	10-50	0-32	NP-9
	28-34	Gravelly loamy fine sand, cobbly sandy loam, loamy sand	SM	A-2-4, A-4	0	0-50	60-100	60-100	30-75	10-40	0-26	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
325C: (Siskiwit)	34-55	Gravelly sandy loam, sand, loamy sand, sand, loamy sand, fine sandy loam, cobbly loamy fine sand	SM	A-2-4, A-4	0	0-50	60-100	60-100	30-95	10-40	0-26	NP-9
	55-80	Stratified gravelly sand to sand to loamy sand	SM, SP-SM, SP	A-2-4, A-3	0	0-50	60-100	60-100	20-75	0-35	0-21	NP-6
Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Gravelly fine sandy loam, cobbly very fine sandy loam, silt loam, sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Silt loam, gravelly fine sandy loam, cobbly very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Silt loam, gravelly fine sandy loam, cobbly very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, gravelly silt loam, fine sandy loam, cobbly sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
325C: (Gogebic)	In				Pct	Pct					Pct	
	20-33	Loamy sand, gravelly fine sandy loam, cobbly loamy very fine sand, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Cobbly sandy loam, fine sandy loam, gravelly loamy fine sand, loamy fine sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	49-54	Gravelly loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Gravelly sandy loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sandy loam, gravelly fine sandy loam, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
327: Foxpaw-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	---	---	NP
	1-3	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	3-8	Sandy loam, cobbly loam	CL-ML, ML, SM	A-4	0	2-30	74-100	70-94	35-94	35-84	0-30	2-11
	8-15	Gravelly sandy loam, cobbly fine sandy loam, sandy loam	SM, CL-ML, ML	A-4	0	2-30	74-100	70-94	40-84	10-67	0-30	NP-11
	15-23	Gravelly sandy loam, sandy loam, gravelly fine sandy loam	SM, CL-ML, ML	A-4	0	2-30	74-100	70-94	40-84	10-67	0-30	NP-11
	23-32	Sandy loam, gravelly sandy loam, loam	SM, CL-ML, ML	A-4	0	2-30	74-100	70-94	40-84	10-67	0-30	NP-11
	32-80	Gravelly loam, gravelly sandy loam, sandy loam, loam, fine sandy loam	SM, CL-ML, ML	A-4	0	2-30	74-100	70-94	40-84	10-67	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
327: Sarwet-----	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-3	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	3-7	Fine sandy loam, sandy loam, loamy sand	SC-SM, ML, CL-ML, SM	A-2-4, A-4	0-8	0-22	75-100	55-98	30-75	15-50	0-30	NP-11
	7-14	Fine sandy loam, gravelly fine sandy loam, cobbly fine sandy loam, sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-8	0-22	75-100	55-98	30-75	15-50	0-30	NP-11
	14-22	Fine sandy loam, gravelly fine sandy loam, cobbly fine sandy loam, sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-8	0-22	75-100	55-98	30-75	15-50	0-30	NP-11
	22-28	Loamy sand, cobbly fine sandy loam, gravelly fine sandy loam, fine sandy loam, sandy loam	SC-SM, SM	A-4, A-2-4	0-8	0-22	75-100	55-98	30-75	15-40	0-30	NP-11
	28-38	Fine sandy loam, gravelly fine sandy loam, cobbly fine sandy loam, sandy loam, loamy sand	SC-SM, SM	A-2-4, A-4	0-8	0-22	75-100	55-98	30-75	15-45	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
327: (Sarwet)	38-47	Loamy sand, fine sand, gravelly fine sand, cobbly fine sand, sandy loam	SP-SM, SC-SM, SM	A-2-4	0-8	0-22	75-100	55-98	30-75	5-30	0-30	NP-11
	47-50	Loamy sand, sandy loam, sandy clay loam	CL-ML, ML, SC-SM, SM, SC	A-4, A-6	0-8	0-22	75-100	55-98	30-75	15-55	0-35	NP-15
	50-80	Sandy loam, loamy sand	SP-SM, SC-SM, SM	A-2-4, A-4	0-8	0-22	75-100	55-98	30-75	10-45	0-30	NP-11
328B: Annalake-----	0-9	Loam	ML	A-8	0	0	95-100	85-100	70-99	25-80	0-25	NP-7
	9-16	Fine sandy loam	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	16-31	Stratified loamy very fine sand to silt loam to loamy fine sand	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	31-48	Stratified sand to fine sand to loamy fine sand to silt loam	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7
	48-61	Stratified sand to fine sand to loamy fine sand to silt loam	SC-SM, ML, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-30	NP-11
	61-80	Stratified fine sand to loamy fine sand to silt loam to silt	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	sieve number--					
							4	10	40	200		
	In				Pct	Pct					Pct	
328B: Karlin-----	0-1	Highly decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-40	0-20	NP-4
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	---	NP
328C: Annalake-----	0-9	Loam	ML	A-8	0	0	95-100	85-100	70-99	25-80	0-25	NP-7
	9-16	Fine sandy loam	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	16-31	Stratified loamy very fine sand to silt loam to loamy fine sand	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	31-48	Stratified sand to fine sand to loamy fine sand to silt loam	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7
	48-61	Stratified sand to fine sand to loamy fine sand to silt loam	SC-SM, ML, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-30	NP-11
	61-80	Stratified fine sand to loamy fine sand to silt loam to silt	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
328C: Karlin-----	0-1	Highly decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-25	NP-7
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-40	0-20	NP-4
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	---	NP
328D: Karlin-----	0-1	Highly decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-20	NP-10
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-40	NP-12
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-55	0-23	NP-6
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	0-19	NP-2

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
328D: Zandi-----	0-0.5	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	NP
	0.5-4	Loamy fine sand, loamy very fine sand	SM, ML	A-2-4, A-4	0	0	95-100	90-100	55-100	10-65	0-25	NP-7
	4-6	Loamy fine sand, loamy very fine sand	ML, SM	A-2-4, A-4	0	0	95-100	90-100	55-100	10-65	0-25	NP-7
	6-34	Very fine sandy loam, fine sandy loam	SM, ML	A-4	0	0	95-100	90-100	60-100	20-70	0-28	NP-9
	34-42	Stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam	ML, SM	A-2-4, A-4	0	0	100	100	50-100	30-80	0-30	NP-11
	42-57	Stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam	SM, ML	A-4, A-2-4	0	0	100	100	60-100	25-70	0-25	NP-7
	57-80	Stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam	SM, ML	A-2-4, A-4	0	0	100	100	60-100	25-70	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
329A: Tula-----	In				Pct	Pct					Pct	
	0-1	Highly decomposed plant material	PT	A-8	0-7	0-30	100	100	100	100	---	NP
	1-5	Silt loam, sandy loam, gravelly fine sandy loam, cobbly very fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Cobbly very fine sandy loam, fine sandy loam	CL-ML, SM, ML	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	8-20	Fine sandy loam, cobbly very fine sandy loam	CL-ML, SM, ML	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	20-28	Fine sandy loam, gravelly sandy loam	ML, CL-ML, SM	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	28-37	Loamy sand, gravelly sandy loam, fine sandy loam, gravelly loam	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-28	NP-9
	37-62	Fine sandy loam, gravelly sandy loam, gravelly loam, gravelly loamy sand	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-30	NP-11
	62-80	Fine sandy loam, gravelly sandy loam	ML, SC-SM, SM	A-4	0-7	1-23	85-100	65-92	40-80	20-55	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
351B: Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Gravelly fine sandy loam, cobbly very fine sandy loam, silt loam, sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Sandy loam, silt loam, cobbly very fine sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, gravelly silt loam, fine sandy loam, cobbly sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Gravelly fine sandy loam, cobbly loamy very fine sand, sandy loam, loamy sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Gravelly loamy fine sand, loamy fine sand, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
351B: (Gogebic)	49-54	Fine sandy loam, cobbly sandy loam, gravelly loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Fine sandy loam, cobbly sandy loam, gravelly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Cobbly sandy loam, gravelly fine sandy loam, sandy loam	SM, ML	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
351C: Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Sandy loam, cobbly very fine sandy loam, silt loam, gravelly fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Silt loam, gravelly fine sandy loam, cobbly very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Silt loam, sandy loam, gravelly fine sandy loam, cobbly very fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
351C: (Gogebic)	In				Pct	Pct					Pct	
	12-20	Very fine sandy loam, cobbly sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Gravelly loamy fine sand, loamy fine sand, fine sandy loam, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	49-54	Cobbly sandy loam, fine sandy loam, gravelly loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Gravelly sandy loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sandy loam, cobbly sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
351D: Gogebic-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Sandy loam, silt loam, cobbly very fine sandy loam, gravelly fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Sandy loam, gravelly fine sandy loam, silt loam, cobbly very fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Gravelly fine sandy loam, silt loam, cobbly very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Gravelly silt loam, very fine sandy loam, cobbly sandy loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Fine sandy loam, gravelly loamy fine sand, loamy fine sand, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
351D: (Gogebic)	49-54	Gravelly loam, cobble sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Gravelly sandy loam, cobble sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sandy loam, cobble sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
351E: Schweitzer-----	0-1	Silt loam, cobble very fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	1-5	Cobble silt loam, fine sandy loam, cobble very fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	5-8	Fine sandy loam, cobble silt loam, cobble very fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	8-21	Fine sandy loam, cobble silt loam, cobble very fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
351E: (Schweitzer)	21-27	Very cobbly loamy sand, very gravelly loamy fine sand, cobbly sandy loam, gravelly fine sandy loam	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	27-43	Gravelly fine sandy loam, very gravelly loamy fine sand, cobbly loamy sand, very cobbly sandy loam	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	43-61	Very cobbly sandy loam, cobbly loamy sand, gravelly fine sandy loam, very gravelly loamy fine sand	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	61-80	Very cobbly loamy sand, very gravelly fine sandy loam, cobbly sandy loam	SM, SC-SM	A-4, A-2-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
351F: Schweitzer-----	0-1	Silt loam, cobbly very fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	1-5	Cobbly very fine sandy loam, fine sandy loam, cobbly silt loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	5-8	Fine sandy loam, cobbly very fine sandy loam, cobbly silt loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	8-21	Fine sandy loam, cobbly very fine sandy loam, cobbly silt loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	21-27	Very gravelly loamy fine sand, gravelly fine sandy loam, very cobbly loamy sand, cobbly sandy loam	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	27-43	Cobbly loamy sand, very cobbly sandy loam, gravelly fine sandy loam, very gravelly loamy fine sand	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	43-61	Very cobbly sandy loam, cobbly loamy sand, gravelly fine sandy loam, very gravelly loamy fine sand	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
351F: (Schweitzer)	61-80	Very gravelly fine sandy loam, cobbly sandy loam, very cobbly loamy sand	SM, SC-SM	A-4, A-2-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
353A: Tula-----	0-1	Highly decomposed plant material	PT	A-8	0-7	0-30	100	100	100	100	---	NP
	1-5	Gravelly silt loam, fine sandy loam, cobbly very fine sandy loam, sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Cobbly very fine sandy loam, fine sandy loam	CL-ML, SM, ML	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	8-20	Cobbly very fine sandy loam, fine sandy loam	CL-ML, SM, ML	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	20-28	Fine sandy loam, gravelly sandy loam	ML, CL-ML, SM	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	28-37	Gravelly loam, fine sandy loam, gravelly sandy loam, loamy sand	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-28	NP-9
	37-62	Gravelly loamy sand, gravelly loam, gravelly sandy loam, fine sandy loam	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-30	NP-11
	62-80	Gravelly sandy loam, fine sandy loam	ML, SC-SM, SM	A-4	0-7	1-23	85-100	65-92	40-80	20-55	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
354B: Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Fine sandy loam, gravelly silt loam, sandy loam, cobbly very fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, cobbly sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Gravelly loamy fine sand, fine sandy loam, loamy fine sand, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
354B: (Gogebic)	49-54	Gravelly loam, fine sandy loam, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Fine sandy loam, cobbly sandy loam, gravelly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Gravelly fine sandy loam, cobbly sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
354C: Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Cobbly very fine sandy loam, gravelly silt loam, sandy loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Cobbly very fine sandy loam, gravelly fine sandy loam, sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Silt loam, sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
354C: (Gogebic)	12-20	Cobbly sandy loam, very fine sandy loam, fine sandy loam, gravelly silt loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Sandy loam, loamy sand, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Gravelly loamy fine sand, cobbly sandy loam, loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	49-54	Gravelly loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Gravelly sandy loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Cobbly sandy loam, gravelly fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
354D: Gogebic-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Sandy loam, gravelly silt loam, fine sandy loam, cobbly very fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Silt loam, cobbly very fine sandy loam, gravelly fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Silt loam, sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Gravelly silt loam, very fine sandy loam, cobbly sandy loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, gravelly fine sandy loam, cobbly loamy very fine sand, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Gravelly loamy fine sand, cobbly sandy loam, loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
354D: (Gogebic)	In				Pct	Pct					Pct	
	49-54	Gravelly loam, cobble sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Gravelly sandy loam, cobble sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Cobble sandy loam, sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
354E: Schweitzer-----	0-1	Fine sandy loam, cobble silt loam, cobble very fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	1-5	Fine sandy loam, cobble very fine sandy loam, cobble silt loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	5-8	Cobble silt loam, cobble very fine sandy loam, fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	8-21	Fine sandy loam, cobble very fine sandy loam, cobble silt loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
354E: (Schweitzer)	21-27	Cobbly sandy loam, very cobbly loamy sand, gravelly fine sandy loam, very gravelly loamy fine sand	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	27-43	Very gravelly loamy fine sand, gravelly fine sandy loam, cobbly loamy sand, very cobbly sandy loam	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	43-61	Very cobbly sandy loam, cobbly loamy sand, gravelly fine sandy loam, very gravelly loamy fine sand	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	61-80	Very gravelly fine sandy loam, cobbly sandy loam, very cobbly loamy sand	SM, SC-SM	A-4, A-2-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
354F: Schweitzer-----	0-1	Cobbly very fine sandy loam, fine sandy loam, cobbly silt loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	1-5	Cobbly very fine sandy loam, fine sandy loam, cobbly silt loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	5-8	Fine sandy loam, cobbly silt loam, cobbly very fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	8-21	Fine sandy loam, cobbly silt loam, cobbly very fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	21-27	Very gravelly loamy fine sand, gravelly fine sandy loam, cobbly sandy loam, very cobbly loamy sand	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	27-43	Cobbly loamy sand, very gravelly loamy fine sand, gravelly fine sandy loam, very cobbly sandy loam	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
354F: (Schweitzer)	43-61	Very gravelly loamy fine sand, gravelly fine sandy loam, cobbly loamy sand, very cobbly sandy loam	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	61-80	Cobbly sandy loam, very gravelly fine sandy loam, very cobbly loamy sand	SM, SC-SM	A-4, A-2-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
363C: Talus.												
Arcadian-----	0-2	Highly decomposed plant material	PT	A-8	0	0	0	0	0	0	---	---
	2-5	Very gravelly fine sandy loam	GC-GM, GM, SM	A-1, A-4, A- 2-4	0-5	10-20	30-75	10-65	5-65	5-45	16-31	1-10
	5-12	Very gravelly fine sandy loam, very gravelly loamy very fine sand	GC-GM, GM, SM	A-1, A-4, A- 2-4	0-5	10-20	30-75	10-65	5-65	5-45	20-40	1-12
	12-22	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
363D: Talus.												
Arcadian-----	0-2	Highly decomposed plant material	PT	A-8	0	0	0	0	0	0	---	---
	2-5	Very gravelly fine sandy loam	GC-GM, GM, SM	A-1, A-4, A- 2-4	0-5	10-20	30-75	10-65	5-65	5-45	16-31	1-10
	5-12	Very gravelly fine sandy loam, very gravelly loamy very fine sand	GC-GM, GM, SM	A-1, A-4, A- 2-4	0-5	10-20	30-75	10-65	5-65	5-45	20-40	1-12
	12-22	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
363E: Talus.												
Arcadian-----	0-2	Highly decomposed plant material	PT	A-8	0	0	0	0	0	0	---	---
	2-5	Very gravelly fine sandy loam	GC-GM, GM, SM	A-1, A-4, A- 2-4	0-5	10-20	30-75	10-65	5-65	5-45	16-31	1-10
	5-12	Very gravelly fine sandy loam, very gravelly loamy very fine sand	GC-GM, GM, SM	A-1, A-4, A- 2-4	0-5	10-20	30-75	10-65	5-65	5-45	20-40	1-12
	12-22	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
363F: Talus.												
Arcadian-----	0-2	Highly decomposed plant material	PT	A-8	0	0	0	0	0	0	---	---
	2-5	Very gravelly fine sandy loam	GC-GM, GM, SM	A-1, A-4, A- 2-4	0-5	10-20	30-75	10-65	5-65	5-45	16-31	1-10
	5-12	Very gravelly fine sandy loam, very gravelly loamy very fine sand	GC-GM, GM, SM	A-1, A-4, A- 2-4	0-5	10-20	30-75	10-65	5-65	5-45	20-40	1-12
	12-22	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
364F. Talus												
365F. Rock outcrop												

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
					4	10	40	200				
369C: Dishno-----	In				Pct	Pct					Pct	
	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-3	Cobbly very fine sandy loam, cobbly silt loam, cobbly fine sandy loam	ML, SM, CL-ML	A-4	0-25	0-25	95-100	85-98	50-90	45-65	0-28	NP-9
	3-9	Cobbly very fine sandy loam, cobbly silt loam, fine sandy loam	ML, SM, CL-ML	A-4	0-25	0-25	95-100	85-98	50-90	45-65	0-28	NP-9
	9-10	Cobbly fine sandy loam, silt loam, cobbly loam	ML, SM, CL- ML, SC-SM	A-4	0-25	0-25	95-100	85-98	50-90	45-65	0-28	NP-9
	10-18	Cobbly fine sandy loam, cobbly very fine sandy loam	SM, ML, SC- SM, CL-ML	A-4	0-25	0-25	95-100	85-98	45-90	30-60	0-28	NP-9
	18-22	Cobbly loamy sand, cobbly fine sandy loam, cobbly very fine sandy loam	SM, CL-ML, ML, SC-SM	A-4, A-2-4	0-25	0-25	95-100	85-98	45-90	10-50	0-28	NP-9
	22-29	Very stony loamy sand, very cobbly loamy sand, cobbly loamy sand	SM	A-2-4	0-25	0-25	85-100	65-85	25-70	10-30	0-25	NP-7
	29-46	Very stony loamy sand, cobbly loamy sand, very cobbly loamy sand	SM	A-2-4	0-25	0-25	85-100	65-85	25-70	10-30	0-25	NP-7
	46-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
369C: Gogebic-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Silt loam, sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Gravelly fine sandy loam, silt loam, sandy loam, cobbly very fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Gravelly fine sandy loam, cobbly very fine sandy loam, sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Fine sandy loam, gravelly silt loam, cobbly sandy loam, very fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Gravelly loamy fine sand, cobbly sandy loam, loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
369C: (Gogebic)	49-54	Gravelly loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Cobbly sandy loam, gravelly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sandy loam, cobbly sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
Peshekee-----	0-1	Moderately decomposed plant material	PT	A-8	0-15	0-50	100	100	100	90-100	---	NP
	1-4	Sandy loam, fine sandy loam, cobbly silt loam	CL-ML, SM, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	4-6	Sandy loam, fine sandy loam, cobbly silt loam	CL-ML, SM, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	6-9	Sandy loam, fine sandy loam, cobbly silt loam	CL-ML, ML, SM	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	9-19	Cobbly fine sandy loam, silt loam, sandy loam	CL-ML, ML, SM	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	19-80	Bedrock	---	---	---	---	---	---	---	---	---	---
	Rock outcrop.											

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
369D: Dishno-----	In				Pct	Pct					Pct	
	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-3	Cobbly very fine sandy loam, cobbly silt loam, cobbly fine sandy loam	ML, SM, CL-ML	A-4	0-25	0-25	95-100	85-98	50-90	45-65	0-28	NP-9
	3-9	Cobbly very fine sandy loam, cobbly silt loam, fine sandy loam	ML, SM, CL-ML	A-4	0-25	0-25	95-100	85-98	50-90	45-65	0-28	NP-9
	9-10	Cobbly loam, silt loam, cobbly fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-25	0-25	95-100	85-98	50-90	45-65	0-28	NP-9
	10-18	Cobbly very fine sandy loam, cobbly fine sandy loam	SM, ML, SC- SM, CL-ML	A-4	0-25	0-25	95-100	85-98	45-90	30-60	0-28	NP-9
	18-22	Cobbly loamy sand, cobbly fine sandy loam, cobbly very fine sandy loam	SM, CL-ML, ML, SC-SM	A-4, A-2-4	0-25	0-25	95-100	85-98	45-90	10-50	0-28	NP-9
	22-29	Very stony loamy sand, very cobbly loamy sand, cobbly loamy sand	SM	A-2-4	0-25	0-25	85-100	65-85	25-70	10-30	0-25	NP-7
	29-46	Very stony loamy sand, very cobbly loamy sand, cobbly loamy sand	SM	A-2-4	0-25	0-25	85-100	65-85	25-70	10-30	0-25	NP-7
	46-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
369D: Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Silt loam, sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Silt loam, gravelly fine sandy loam, cobbly very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Cobbly sandy loam, fine sandy loam, gravelly silt loam, very fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Loamy fine sand, cobbly sandy loam, fine sandy loam, gravelly loamy fine sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
369D: (Gogebic)	49-54	Fine sandy loam, cobbly sandy loam, gravelly loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Fine sandy loam, cobbly sandy loam, gravelly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sandy loam, cobbly sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
Peshekee-----	0-1	Moderately decomposed plant material	PT	A-8	0-15	0-50	100	100	100	90-100	---	NP
	1-4	Cobbly silt loam, sandy loam, fine sandy loam	CL-ML, SM, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	4-6	Sandy loam, fine sandy loam, cobbly silt loam	CL-ML, SM, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	6-9	Cobbly silt loam, fine sandy loam, sandy loam	CL-ML, ML, SM	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	9-19	Sandy loam, cobbly fine sandy loam, silt loam	CL-ML, ML, SM	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	19-80	Bedrock	---	---	---	---	---	---	---	---	---	---
	Rock outcrop.											

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
369E: Michigamme-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-2	Cobbly fine sandy loam, loam, cobbly sandy loam, cobbly silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	2-4	Cobbly fine sandy loam, cobbly silt loam, loam, cobbly sandy loam	SC-SM, SM, CL-ML, ML	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	4-7	Loam, cobbly sandy loam, silt loam, cobbly fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	7-14	Loam, cobbly sandy loam, cobbly fine sandy loam, silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	14-20	Silt loam, loam, gravelly sandy loam, cobbly fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	20-24	Cobbly fine sandy loam, very cobbly silt loam, cobbly sandy loam, loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	24-31	Very cobbly fine sandy loam, gravelly sandy loam, cobbly loamy sand, gravelly loamy sand, cobbly sandy loam	CL-ML, ML, SC-SM, SM	A-4, A-2-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	31-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
369E: Schweitzer-----	0-1	Cobbly silt loam, fine sandy loam, cobbly very fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	1-5	Cobbly silt loam, fine sandy loam, cobbly very fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	5-8	Cobbly very fine sandy loam, cobbly silt loam, fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	8-21	Fine sandy loam, cobbly very fine sandy loam, cobbly silt loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	21-27	Cobbly sandy loam, very cobbly loamy sand, gravelly fine sandy loam, very gravelly loamy fine sand	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	27-43	Gravelly fine sandy loam, cobbly loamy sand, very cobbly sandy loam, very gravelly loamy fine sand	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
							4	10	40	200		
	In				Pct	Pct					Pct	
369E: (Schweitzer)	43-61	Cobbly loamy sand, gravelly fine sandy loam, very gravelly loamy fine sand, very cobbly sandy loam	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	61-80	Very cobbly loamy sand, very gravelly fine sandy loam, cobbly sandy loam	SM, SC-SM	A-4, A-2-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
Peshekee-----	0-1	Moderately decomposed plant material	PT	A-8	0-15	0-50	100	100	100	90-100	---	NP
	1-4	Cobbly silt loam, fine sandy loam, sandy loam	CL-ML, SM, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	4-6	Fine sandy loam, cobbly silt loam, sandy loam	CL-ML, SM, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	6-9	Cobbly silt loam, sandy loam, fine sandy loam	CL-ML, ML, SM	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	9-19	Cobbly fine sandy loam, sandy loam, silt loam	CL-ML, ML, SM	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	19-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
369F: Michigamme-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-2	Cobbly sandy loam, loam, cobbly fine sandy loam, cobbly silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	2-4	Loam, cobbly silt loam, cobbly sandy loam, cobbly fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	4-7	Loam, cobbly sandy loam, silt loam, cobbly fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	7-14	Silt loam, loam, cobbly sandy loam, cobbly fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	14-20	Cobbly fine sandy loam, loam, gravelly sandy loam, silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	20-24	Very cobbly silt loam, cobbly sandy loam, cobbly fine sandy loam, loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	24-31	Gravelly loamy sand, very cobbly fine sandy loam, cobbly loamy sand, gravelly sandy loam, cobbly sandy loam	CL-ML, ML, SC-SM, SM	A-4, A-2-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	31-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
369F: Schweitzer-----	0-1	Cobbly very fine sandy loam, fine sandy loam, cobbly silt loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	1-5	Fine sandy loam, cobbly silt loam, cobbly very fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	5-8	Cobbly silt loam, cobbly very fine sandy loam, fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	8-21	Cobbly silt loam, cobbly very fine sandy loam, fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	21-27	Gravelly fine sandy loam, very cobbly loamy sand, cobbly sandy loam, very gravelly loamy fine sand	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	27-43	Very gravelly loamy fine sand, gravelly fine sandy loam, cobbly loamy sand, very cobbly sandy loam	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
369F: (Schweitzer)	43-61	Very gravelly loamy fine sand, gravelly fine sandy loam, cobbly loamy sand, very cobbly sandy loam	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	61-80	Very cobbly loamy sand, very gravelly fine sandy loam, cobbly sandy loam	SM, SC-SM	A-4, A-2-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
Peshekee-----	0-1	Moderately decomposed plant material	PT	A-8	0-15	0-50	100	100	100	90-100	---	NP
	1-4	Cobbly silt loam, fine sandy loam, sandy loam	CL-ML, SM, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	4-6	Fine sandy loam, sandy loam, cobbly silt loam	CL-ML, SM, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	6-9	Sandy loam, fine sandy loam, cobbly silt loam	SM, CL-ML, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	9-19	Sandy loam, silt loam, cobbly fine sandy loam	CL-ML, ML, SM	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	19-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
					4	10	40	200				
	In				Pct	Pct					Pct	
370E: Peshekee-----	0-1	Moderately decomposed plant material	PT	A-8	0-15	0-50	100	100	100	90-100	---	NP
	1-4	Fine sandy loam, sandy loam, cobbly silt loam	CL-ML, SM, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	4-6	Sandy loam, fine sandy loam, cobbly silt loam	CL-ML, SM, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	6-9	Sandy loam, cobbly silt loam, fine sandy loam	CL-ML, ML, SM	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	9-19	Cobbly fine sandy loam, silt loam, sandy loam	CL-ML, ML, SM	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	19-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
370F: Peshekee-----	0-1	Moderately decomposed plant material	PT	A-8	0-15	0-50	100	100	100	90-100	---	NP
	1-4	Cobbly silt loam, fine sandy loam, sandy loam	CL-ML, SM, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	4-6	Fine sandy loam, cobbly silt loam, sandy loam	CL-ML, SM, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	6-9	Fine sandy loam, cobbly silt loam, sandy loam	CL-ML, ML, SM	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	9-19	Cobbly fine sandy loam, silt loam, sandy loam	CL-ML, ML, SM	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	19-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
375. Dumps and Pits, mine												
380: Beseman-----	0-2	Mucky peat	PT	A-8	0	0	100	100	100	90-100	---	NP
	2-9	Peat	PT	A-8	0	0	100	100	100	90-100	---	NP
	9-28	Muck	PT	A-8	0	0	100	100	90-100	40-100	---	NP
	28-35	Muck	PT	A-8	0	0	100	100	90-100	40-100	---	NP
	35-44	Muck	PT	A-8	0	0	100	100	90-100	40-100	---	NP
	44-47	Loam, fine sandy loam, sandy loam	CL-ML, CL, ML	A-4, A-6	0	0	100	100	60-90	35-75	0-36	NP-16
	47-57	Silt loam, fine sandy loam, sandy loam, loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	60-95	35-80	0-36	NP-16
	57-67	Fine sandy loam, loam, silt loam, sandy loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	60-95	35-80	0-36	NP-16
	67-80	Sandy loam, loam, fine sandy loam, silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	60-95	35-80	0-36	NP-16
Greenwood-----	0-8	Peat	PT	A-8	0	0	100	100	100	90-100	---	NP
	8-11	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	11-65	Mucky peat	PT	A-8	0	0	100	100	90-100	40-100	---	NP
	65-80	Mucky peat	PT	A-8	0	0	100	100	90-100	40-100	---	NP
382: Cathro-----	0-6	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	6-31	Muck	PT	A-8	0	0	100	90-100	90-100	40-100	---	NP
	31-80	Silt loam, very fine sandy loam, fine sandy loam, loam, sandy loam, silty clay loam	CL-ML, ML, SM, SC-SM, CL	A-4, A-6	0	0-10	85-100	65-100	50-85	30-55	16-39	1-18

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
382: Arnheim-----	0-5	Mucky silt loam, very fine sandy loam, loamy very fine sand, silt loam	SM, CL-ML, ML	A-4	0	0	100	95-100	60-100	30-90	0-28	NP-9
	5-10	Silt loam, very fine sandy loam	CL-ML, ML, SM	A-4	0	0	100	95-100	60-100	30-90	0-28	NP-9
	10-80	Stratified very fine sandy loam to silt loam to loamy fine sand to fine sandy loam	CL-ML, ML, SM	A-4	0	0	100	95-100	60-100	30-90	0-28	NP-9
388: Gay-----	0-4	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	4-7	Loamy sand, cobble sandy loam, fine sandy loam, mucky sandy loam	SM	A-2-4, A-4	0-24	0-15	90-100	75-100	35-80	10-50	0-21	NP-4
	7-11	Sandy loam, loamy sand, cobble sandy loam	SM	A-2-4, A-4	0-24	0-15	90-100	75-100	35-75	10-40	0-21	NP-4
	11-16	Sandy loam, fine sandy loam	SM, SC-SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-28	2-9
	16-30	Fine sandy loam, sandy loam	SM, SC-SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-25	2-7
	30-80	Sandy loam, fine sandy loam	SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-23	2-6

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
388: Tula-----	In				Pct	Pct					Pct	
	0-1	Highly decomposed plant material	PT	A-8	0-7	0-30	100	100	100	100	---	NP
	1-5	Cobbly very fine sandy loam, fine sandy loam	CL-ML, ML, SM	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	5-8	Cobbly very fine sandy loam, fine sandy loam	CL-ML, SM, ML	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	8-20	Cobbly very fine sandy loam, fine sandy loam	CL-ML, SM, ML	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	20-28	Gravelly sandy loam, fine sandy loam	ML, CL-ML, SM	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	28-37	Loamy sand, gravelly sandy loam, fine sandy loam, gravelly loam	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-28	NP-9
	37-62	Fine sandy loam, gravelly sandy loam, gravelly loam, gravelly loamy sand	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-30	NP-11
	62-80	Fine sandy loam, gravelly sandy loam	ML, SC-SM, SM	A-4	0-7	1-23	85-100	65-92	40-80	20-55	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
398B: Tula-----	In				Pct	Pct					Pct	
	0-1	Highly decomposed plant material	PT	A-8	0-7	0-30	100	100	100	100	---	NP
	1-5	Cobbly very fine sandy loam, fine sandy loam	CL-ML, ML, SM	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	5-8	Cobbly very fine sandy loam, fine sandy loam	CL-ML, SM, ML	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	8-20	Cobbly very fine sandy loam, fine sandy loam	CL-ML, SM, ML	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	20-28	Gravelly sandy loam, fine sandy loam	ML, CL-ML, SM	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	28-37	Loamy sand, gravelly sandy loam, fine sandy loam, gravelly loam	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-28	NP-9
	37-62	Gravelly loamy sand, gravelly sandy loam, fine sandy loam, gravelly loam	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-30	NP-11
	62-80	Gravelly sandy loam, fine sandy loam	ML, SC-SM, SM	A-4	0-7	1-23	85-100	65-92	40-80	20-55	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
398B: Gay-----	0-4	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	4-7	Loamy sand, cobbly sandy loam, mucky sandy loam, fine sandy loam	SM	A-2-4, A-4	0-24	0-15	90-100	75-100	35-80	10-50	0-21	NP-4
	7-11	Sandy loam, loamy sand, cobbly sandy loam	SM	A-2-4, A-4	0-24	0-15	90-100	75-100	35-75	10-40	0-21	NP-4
	11-16	Fine sandy loam, sandy loam	SC-SM, SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-28	2-9
	16-30	Sandy loam, fine sandy loam	SM, SC-SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-25	2-7
	30-80	Fine sandy loam, sandy loam	SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-23	2-6
Wakefield-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-4	Silt loam, fine sandy loam, loam	CL-ML, SM, ML	A-4	0	0-7	95-100	78-95	50-90	30-70	0-30	NP-11
	4-7	Loam, silt loam, fine sandy loam	ML, SM, CL-ML	A-4	0	0-7	95-100	78-95	50-90	30-70	0-30	NP-11
	7-10	Silt loam, fine sandy loam, loam	CL-ML, SM, ML	A-4	0	0-7	95-100	78-95	50-90	30-70	0-30	NP-11
	10-16	Silt loam, loam, fine sandy loam	CL-ML, ML, SM	A-4	0	0-7	95-100	78-95	50-90	30-70	0-30	NP-11
	16-26	Fine sandy loam, sandy loam, loam	CL-ML, ML, SM	A-6, A-4	0	0-7	95-100	78-95	65-90	40-75	0-37	NP-16
	26-54	Loam, silt loam, fine sandy loam	CL-ML, SM, ML	A-6, A-4	0	0-7	95-100	78-95	65-90	40-75	0-37	NP-16
	54-70	Sandy loam, loam, fine sandy loam	CL-ML, ML, SM	A-4	0	0-7	95-100	78-95	50-90	30-70	0-30	NP-11
	70-80	Fine sandy loam, very fine sandy loam, loam	CL-ML, ML, SM	A-4	0	0-7	95-100	78-95	50-90	30-70	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	410					
							4	10	40	200		
	In				Pct	Pct					Pct	
418:												
Loxley-----	0-5	Peat	PT	A-8	0	0	100	100	100	90-100	---	NP
	5-26	Muck	PT	A-8	0	0	100	100	90-100	40-100	---	NP
	26-45	Muck	PT	A-8	0	0	100	100	90-100	40-100	---	NP
	45-80	Mucky peat	PT	A-8	0	0	100	100	90-100	40-100	---	NP
Beseman-----	0-2	Mucky peat	PT	A-8	0	0	100	100	100	90-100	---	NP
	2-9	Peat	PT	A-8	0	0	100	100	100	90-100	---	NP
	9-28	Muck	PT	A-8	0	0	100	100	90-100	40-100	---	NP
	28-35	Muck	PT	A-8	0	0	100	100	90-100	40-100	---	NP
	35-44	Muck	PT	A-8	0	0	100	100	90-100	40-100	---	NP
	44-47	Loam, fine sandy loam, sandy loam	CL-ML, CL, ML	A-4, A-6	0	0	100	100	60-90	35-75	0-36	NP-16
	47-57	Fine sandy loam, silt loam, sandy loam, loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	60-95	35-80	0-36	NP-16
	57-67	Silt loam, fine sandy loam, sandy loam, loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	60-95	35-80	0-36	NP-16
	67-80	Fine sandy loam, sandy loam, loam, silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	60-95	35-80	0-36	NP-16
419:												
Pleine-----	0-9	Very cobbly muck	PT	A-8	0-25	0-50	100	100	100	90-100	---	NP
	9-20	Very fine sandy loam, fine sandy loam, loam, sandy loam	SM, ML, CL- ML, SC-SM	A-4	0-25	6-25	90-100	78-100	50-95	30-60	16-25	1-7
	20-33	Sandy loam, loam, fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-25	6-25	90-100	78-100	50-95	30-60	16-25	1-7
	33-80	Fine sandy loam, gravelly sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-25	6-25	70-95	50-78	30-70	10-50	16-25	1-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
419:												
Cathro-----	0-6	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	6-31	Muck	PT	A-8	0	0	100	90-100	90-100	40-100	---	NP
	31-80	Silty clay loam, silt loam, very fine sandy loam, loam, fine sandy loam, sandy loam	CL-ML, ML, SM, SC-SM, CL	A-4, A-6	0	0-10	85-100	65-100	50-85	30-55	16-39	1-18
Gay-----	0-4	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	4-7	Mucky sandy loam, loamy sand, fine sandy loam, cobbly sandy loam	SM	A-2-4, A-4	0-24	0-15	90-100	75-100	35-80	10-50	0-21	NP-4
	7-11	Cobbly sandy loam, loamy sand, sandy loam	SM	A-2-4, A-4	0-24	0-15	90-100	75-100	35-75	10-40	0-21	NP-4
	11-16	Sandy loam, fine sandy loam	SM, SC-SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-28	2-9
	16-30	Sandy loam, fine sandy loam	SM, SC-SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-25	2-7
	30-80	Sandy loam, fine sandy loam	SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-23	2-6

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
424: Gay-----	0-4	Mucky peat	PT	A-8	0-8	0-15	100	100	100	90-100	---	NP
	4-7	Loamy sand, cobbly sandy loam, mucky sandy loam, fine sandy loam	SM	A-2-4, A-4	0-24	0-15	90-100	75-100	35-80	10-50	0-21	NP-4
	7-11	Loamy sand, cobbly sandy loam, sandy loam	SM	A-2-4, A-4	0-24	0-15	90-100	75-100	35-75	10-40	0-21	NP-4
	11-16	Sandy loam, fine sandy loam	SM, SC-SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-28	2-9
	16-30	Fine sandy loam, sandy loam	SM, SC-SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-25	2-7
	30-80	Sandy loam, fine sandy loam	SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-23	2-6
425: Foxpaw-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	---	---	NP
	1-3	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	3-8	Cobbly loam, sandy loam	CL-ML, ML, SM	A-4	0	2-30	74-100	70-94	35-94	35-84	0-30	2-11
	8-15	Sandy loam, cobbly fine sandy loam, gravelly sandy loam	SM, CL-ML, ML	A-4	0	2-30	74-100	70-94	40-84	10-67	0-30	NP-11
	15-23	Sandy loam, gravelly fine sandy loam, gravelly sandy loam	SM, CL-ML, ML	A-4	0	2-30	74-100	70-94	40-84	10-67	0-30	NP-11
	23-32	Gravelly sandy loam, loam, sandy loam	SM, CL-ML, ML	A-4	0	2-30	74-100	70-94	40-84	10-67	0-30	NP-11
	32-80	Loam, gravelly sandy loam, fine sandy loam, sandy loam, gravelly loam	SM, CL-ML, ML	A-4	0	2-30	74-100	70-94	40-84	10-67	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
425: Gay-----	0-4	Mucky peat	PT	A-8	0-8	0-15	100	100	100	90-100	---	NP
	4-7	Loamy sand, cobbly sandy loam, mucky sandy loam, fine sandy loam	SM	A-2-4, A-4	0-24	0-15	90-100	75-100	35-80	10-50	0-21	NP-4
	7-11	Sandy loam, cobbly sandy loam, loamy sand	SM	A-2-4, A-4	0-24	0-15	90-100	75-100	35-75	10-40	0-21	NP-4
	11-16	Fine sandy loam, sandy loam	SM, SC-SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-28	2-9
	16-30	Sandy loam, fine sandy loam	SM, SC-SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-25	2-7
	30-80	Fine sandy loam, sandy loam	SM	A-2-4, A-4	0-8	0-8	90-100	75-100	45-80	25-50	17-23	2-6

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
428C: Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Cobbly very fine sandy loam, sandy loam, silt loam, gravelly fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Silt loam, sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Silt loam, sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, cobbly sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Cobbly sandy loam, loamy fine sand, gravelly loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
428C: (Gogebic)	In				Pct	Pct					Pct	
	49-54	Gravelly loam, cobble sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Gravelly sandy loam, cobble sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sandy loam, cobble sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
Michigamme-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-2	Cobbly silt loam, cobble sandy loam, cobble fine sandy loam, loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	2-4	Loam, cobble fine sandy loam, cobble sandy loam, cobble silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	4-7	Cobbly fine sandy loam, silt loam, cobble sandy loam, loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	7-14	Cobbly fine sandy loam, cobble sandy loam, loam, silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
428C: (Michigamme)	In				Pct	Pct					Pct	
	14-20	Gravelly sandy loam, cobbly fine sandy loam, loam, silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	20-24	Cobbly sandy loam, cobbly fine sandy loam, very cobbly silt loam, loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	24-31	Cobbly sandy loam, gravelly sandy loam, cobbly loamy sand, gravelly loamy sand, very cobbly fine sandy loam	CL-ML, ML, SC-SM, SM	A-4, A-2-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	31-80	Bedrock	---	---	---	---	---	---	---	---	---	---
428D: Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Silt loam, gravelly fine sandy loam, cobbly very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
428D: (Gogebic)	In				Pct	Pct					Pct	
	8-12	Gravelly fine sandy loam, cobbly very fine sandy loam, sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, cobbly sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Cobbly sandy loam, loamy fine sand, gravelly loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	49-54	Gravelly loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Gravelly sandy loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sandy loam, cobbly sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
428D: Michigamme-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-2	Loam, cobbly fine sandy loam, cobbly sandy loam, cobbly silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	2-4	Loam, cobbly fine sandy loam, cobbly sandy loam, cobbly silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	4-7	Loam, cobbly fine sandy loam, cobbly sandy loam, silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	7-14	Cobbly sandy loam, silt loam, cobbly fine sandy loam, loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	14-20	Silt loam, cobbly fine sandy loam, gravelly sandy loam, loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	20-24	Loam, cobbly fine sandy loam, cobbly sandy loam, very cobbly silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	24-31	Very cobbly fine sandy loam, gravelly loamy sand, cobbly sandy loam, gravelly sandy loam, cobbly loamy sand	CL-ML, ML, SC-SM, SM	A-4, A-2-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	31-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
429B: Gogebic-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Cobbly very fine sandy loam, sandy loam, gravelly fine sandy loam, silt loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Silt loam, gravelly fine sandy loam, sandy loam, cobbly very fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, cobbly sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Cobbly loamy very fine sand, loamy sand, sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Fine sandy loam, cobbly sandy loam, loamy fine sand, gravelly loamy fine sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
429B: (Gogebic)	49-54	Cobbly sandy loam, fine sandy loam, gravelly loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Gravelly sandy loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Cobbly sandy loam, sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
Peshekee-----	0-1	Moderately decomposed plant material	PT	A-8	0-15	0-50	100	100	100	90-100	---	NP
	1-4	Sandy loam, cobbly silt loam, fine sandy loam	CL-ML, SM, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	4-6	Cobbly silt loam, fine sandy loam, sandy loam	CL-ML, SM, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	6-9	Cobbly silt loam, fine sandy loam, sandy loam	CL-ML, ML, SM	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	9-19	Sandy loam, silt loam, cobbly fine sandy loam	CL-ML, ML, SM	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	19-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
429C: Gogebic-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Sandy loam, cobbly very fine sandy loam, silt loam, gravelly fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Cobbly very fine sandy loam, sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Fine sandy loam, gravelly silt loam, very fine sandy loam, cobbly sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, gravelly fine sandy loam, cobbly loamy very fine sand, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Loamy fine sand, cobbly sandy loam, gravelly loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
429C: (Gogebic)	49-54	Gravelly loam, cobble sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Fine sandy loam, gravelly sandy loam, cobble sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Gravelly fine sandy loam, cobble sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
Peshekee-----	0-1	Moderately decomposed plant material	PT	A-8	0-15	0-50	100	100	100	90-100	---	NP
	1-4	Cobbly silt loam, sandy loam, fine sandy loam	CL-ML, SM, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	4-6	Sandy loam, fine sandy loam, cobble silt loam	CL-ML, SM, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	6-9	Sandy loam, fine sandy loam, cobble silt loam	CL-ML, ML, SM	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	9-19	Cobbly fine sandy loam, sandy loam, silt loam	CL-ML, ML, SM	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	19-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
429D: Gogebic-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Cobbly very fine sandy loam, gravelly fine sandy loam, silt loam, sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Silt loam, sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Cobbly sandy loam, very fine sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Sandy loam, loamy sand, gravelly fine sandy loam, cobbly loamy very fine sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Gravelly loamy fine sand, loamy fine sand, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
429D: (Gogebic)	In				Pct	Pct					Pct	
	49-54	Gravelly loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Fine sandy loam, cobbly sandy loam, gravelly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sandy loam, cobbly sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
Peshekee-----	0-1	Moderately decomposed plant material	PT	A-8	0-15	0-50	100	100	100	90-100	---	NP
	1-4	Cobbly silt loam, fine sandy loam, sandy loam	CL-ML, SM, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	4-6	Fine sandy loam, sandy loam, cobbly silt loam	CL-ML, SM, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	6-9	Fine sandy loam, cobbly silt loam, sandy loam	CL-ML, ML, SM	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	9-19	Cobbly fine sandy loam, silt loam, sandy loam	CL-ML, ML, SM	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	19-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
429E: Schweitzer-----	0-1	Cobbly silt loam, cobbly very fine sandy loam, fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	1-5	Cobbly very fine sandy loam, fine sandy loam, cobbly silt loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	5-8	Cobbly silt loam, fine sandy loam, cobbly very fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	8-21	Fine sandy loam, cobbly silt loam, cobbly very fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	21-27	Very gravelly loamy fine sand, gravelly fine sandy loam, cobbly sandy loam, very cobbly loamy sand	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	27-43	Very cobbly sandy loam, gravelly fine sandy loam, very gravelly loamy fine sand, cobbly loamy sand	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
429E: (Schweitzer)	43-61	Gravelly fine sandy loam, very gravelly loamy fine sand, cobbly loamy sand, very cobbly sandy loam	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	61-80	Very cobbly loamy sand, very gravelly fine sandy loam, cobbly sandy loam	SM, SC-SM	A-4, A-2-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
Peshekee-----	0-1	Moderately decomposed plant material	PT	A-8	0-15	0-50	100	100	100	90-100	---	NP
	1-4	Cobbly silt loam, sandy loam, fine sandy loam	CL-ML, SM, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	4-6	Fine sandy loam, cobbly silt loam, sandy loam	CL-ML, SM, ML	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	6-9	Fine sandy loam, cobbly silt loam, sandy loam	CL-ML, ML, SM	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	9-19	Sandy loam, cobbly fine sandy loam, silt loam	CL-ML, ML, SM	A-4	0-15	0-50	95-100	75-100	60-95	30-75	0-30	NP-11
	19-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
430B: Stutts-----	In				Pct	Pct					Pct	
	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-6	Sandy loam, fine sandy loam, loamy fine sand	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	6-8	Loamy fine sand, fine sandy loam, sandy loam	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	8-15	Fine sand, loamy fine sand, sandy loam, fine sandy loam	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-25	NP-4
	15-18	Fine sandy loam, sandy loam, loamy fine sand, fine sand	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-21	NP-4
	18-28	Fine sand, sand	SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	---	NP
	28-80	Sand, fine sand	SP-SM	A-3	0	0	92-100	85-100	70-95	8-30	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
430C: Stutts-----	In				Pct	Pct					Pct	
	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-6	Fine sandy loam, loamy fine sand, sandy loam	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	6-8	Fine sandy loam, loamy fine sand, sandy loam	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	8-15	Fine sand, sandy loam, fine sandy loam, loamy fine sand	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-25	NP-4
	15-18	Loamy fine sand, fine sand, fine sandy loam, sandy loam	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-21	NP-4
	18-28	Sand, fine sand	SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	---	NP
	28-80	Sand, fine sand	SP-SM	A-3	0	0	92-100	85-100	70-95	8-30	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
430D: Stutts-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-6	Fine sandy loam, loamy fine sand, sandy loam	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	6-8	Sandy loam, fine sandy loam, loamy fine sand	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	8-15	Fine sandy loam, loamy fine sand, fine sand, sandy loam	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-25	NP-4
	15-18	Sandy loam, fine sand, fine sandy loam, loamy fine sand	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-21	NP-4
	18-28	Fine sand, sand	SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	---	NP
	28-80	Sand, fine sand	SP-SM	A-3	0	0	92-100	85-100	70-95	8-30	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
430E: Stutts-----	In				Pct	Pct					Pct	
	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-6	Fine sandy loam, loamy fine sand, sandy loam	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	6-8	Sandy loam, fine sandy loam, loamy fine sand	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	8-15	Fine sand, loamy fine sand, sandy loam, fine sandy loam	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-25	NP-4
	15-18	Fine sandy loam, sandy loam, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-21	NP-4
	18-28	Fine sand, sand	SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	---	NP
	28-80	Fine sand, sand	SP-SM	A-3	0	0	92-100	85-100	70-95	8-30	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
432C: Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Gravelly fine sandy loam, sandy loam, silt loam, cobbly very fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Gravelly fine sandy loam, cobbly very fine sandy loam, sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Sandy loam, silt loam, gravelly fine sandy loam, cobbly very fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, cobbly sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, gravelly fine sandy loam, cobbly loamy very fine sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Loamy fine sand, cobbly sandy loam, gravelly loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
432C: (Gogebic)	49-54	Gravelly loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Cobbly sandy loam, fine sandy loam, gravelly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Gravelly fine sandy loam, cobbly sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
Michigamme-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-2	Loam, cobbly fine sandy loam, cobbly sandy loam, cobbly silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	2-4	Cobbly silt loam, loam, cobbly sandy loam, cobbly fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	4-7	Loam, cobbly sandy loam, silt loam, cobbly fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	7-14	Cobbly fine sandy loam, silt loam, loam, cobbly sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	14-20	Cobbly fine sandy loam, gravelly sandy loam, loam, silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
432C: (Michigamme)	20-24	Cobbly fine sandy loam, cobbly sandy loam, loam, very cobbly silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	24-31	Gravelly sandy loam, cobbly loamy sand, gravelly loamy sand, very cobbly fine sandy loam, cobbly sandy loam	CL-ML, ML, SC-SM, SM	A-4, A-2-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	31-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
432D: Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Cobbly very fine sandy loam, gravelly fine sandy loam, silt loam, sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Silt loam, gravelly fine sandy loam, cobbly very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
432D: (Gogebic)	12-20	Gravelly silt loam, fine sandy loam, very fine sandy loam, cobbly sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, gravelly fine sandy loam, cobbly loamy very fine sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Loamy fine sand, gravelly loamy fine sand, fine sandy loam, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	49-54	Fine sandy loam, cobbly sandy loam, gravelly loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Fine sandy loam, cobbly sandy loam, gravelly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Gravelly fine sandy loam, sandy loam, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
432D: Michigamme-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-2	Cobbly sandy loam, loam, cobbly fine sandy loam, cobbly silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	2-4	Loam, cobbly fine sandy loam, cobbly sandy loam, cobbly silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	4-7	Cobbly fine sandy loam, silt loam, cobbly sandy loam, loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	7-14	Cobbly fine sandy loam, cobbly sandy loam, loam, silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	14-20	Cobbly fine sandy loam, gravelly sandy loam, loam, silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	20-24	Very cobbly silt loam, cobbly fine sandy loam, cobbly sandy loam, loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	24-31	Gravelly sandy loam, cobbly loamy sand, gravelly loamy sand, very cobbly fine sandy loam, cobbly sandy loam	CL-ML, ML, SC-SM, SM	A-4, A-2-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	31-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
					4	10	40	200				
	In				Pct	Pct					Pct	
432D: Rock outcrop.												
432E: Schweitzer-----	0-1	Fine sandy loam, cobbly very fine sandy loam, cobbly silt loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	1-5	Fine sandy loam, cobbly silt loam, cobbly very fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	5-8	Fine sandy loam, cobbly very fine sandy loam, cobbly silt loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	8-21	Cobbly silt loam, cobbly very fine sandy loam, fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	21-27	Cobbly sandy loam, very cobbly loamy sand, gravelly fine sandy loam, very gravelly loamy fine sand	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	27-43	Cobbly loamy sand, very gravelly loamy fine sand, gravelly fine sandy loam, very cobbly sandy loam	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
432E: (Schweitzer)	43-61	Very gravelly loamy fine sand, gravelly fine sandy loam, cobbly loamy sand, very cobbly sandy loam	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	61-80	Cobbly sandy loam, very gravelly fine sandy loam, very cobbly loamy sand	SM, SC-SM	A-4, A-2-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
Michigamme-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-2	Loam, cobbly fine sandy loam, cobbly sandy loam, cobbly silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	2-4	Cobbly silt loam, loam, cobbly fine sandy loam, cobbly sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	4-7	Cobbly fine sandy loam, silt loam, cobbly sandy loam, loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	7-14	Cobbly sandy loam, silt loam, loam, cobbly fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
432E: (Michigamme)	In				Pct	Pct					Pct	
	14-20	Loam, silt loam, cobbly fine sandy loam, gravelly sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	20-24	Loam, cobbly fine sandy loam, cobbly sandy loam, very cobbly silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	24-31	Gravelly loamy sand, very cobbly fine sandy loam, cobbly sandy loam, gravelly sandy loam, cobbly loamy sand	CL-ML, ML, SC-SM, SM	A-4, A-2-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	31-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
432F: Schweitzer-----	0-1	Cobbly very fine sandy loam, cobbly silt loam, fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	1-5	Cobbly very fine sandy loam, fine sandy loam, cobbly silt loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	5-8	Cobbly silt loam, fine sandy loam, cobbly very fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	8-21	Fine sandy loam, cobbly very fine sandy loam, cobbly silt loam	ML, SM, CL- ML, SC-SM	A-4	0-15	3-30	90-100	70-100	60-90	45-75	0-30	NP-11
	21-27	Cobbly sandy loam, very cobbly loamy sand, gravelly fine sandy loam, very gravelly loamy fine sand	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	27-43	Very gravelly loamy fine sand, gravelly fine sandy loam, cobbly loamy sand, very cobbly sandy loam	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
432F: (Schweitzer)	In				Pct	Pct					Pct	
	43-61	Cobbly loamy sand, very cobbly sandy loam, gravelly fine sandy loam, very gravelly loamy fine sand	SM, SC-SM	A-2-4, A-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
	61-80	Very cobbly loamy sand, very gravelly fine sandy loam, cobbly sandy loam	SM, SC-SM	A-4, A-2-4	0-15	5-37	70-100	50-90	30-65	10-45	0-25	NP-7
Michigamme-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-2	Cobbly silt loam, loam, cobbly fine sandy loam, cobbly sandy loam	ML, SC-SM, SM, CL-ML	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	2-4	Cobbly silt loam, cobbly fine sandy loam, loam, loam, cobbly sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	4-7	Silt loam, cobbly sandy loam, loam, cobbly fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	7-14	Silt loam, cobbly fine sandy loam, loam, cobbly sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	14-20	Gravelly sandy loam, loam, cobbly fine sandy loam, silt loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
432F: (Michigamme)	In				Pct	Pct					Pct	
	20-24	Cobbly fine sandy loam, very cobbly silt loam, loam, cobbly sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	24-31	Gravelly loamy sand, very cobbly fine sandy loam, cobbly sandy loam, gravelly sandy loam, cobbly loamy sand	CL-ML, ML, SC-SM, SM	A-4, A-2-4	0-50	0-50	85-100	65-100	55-95	30-70	0-30	NP-11
	31-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
433B: McMillan-----	0-1	Moderately decomposed plant material	PT	A-8	0	0-7	95-100	85-100	85-100	40-80	---	---
	1-2	Fine sandy loam	SM, ML	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-60	0-21	NP-4
	2-5	Fine sandy loam	SM	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	5-9	Fine sandy loam, very fine sandy loam	SM	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	9-14	Fine sandy loam, very fine sandy loam	SM	A-2-4, A-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	14-19	Loamy fine sand, loamy sand, fine sandy loam	SM	A-2-4, A-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	19-29	Loamy fine sand, fine sand, loamy sand	SP-SM, SM	A-2, A-2-4	0	0-7	95-100	85-100	70-90	10-30	0-16	NP-0
	29-72	Stratified sand to loamy fine sand	SM, SP-SM	A-2, A-2-4	0	0-7	95-100	85-100	70-90	10-30	0-16	NP-0
	72-80	Sand, stratified coarse sand to sand to loamy sand	SP-SM, SP	A-3, A-2-4	0	0-7	95-100	85-100	60-90	1-20	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
433C: McMillan-----	0-1	Moderately decomposed plant material	PT	A-8	0	0-7	95-100	85-100	85-100	40-80	---	---
	1-2	Fine sandy loam	SM, ML	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-60	0-21	NP-4
	2-5	Fine sandy loam	SM	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	5-9	Very fine sandy loam, fine sandy loam	SM	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	9-14	Fine sandy loam, very fine sandy loam	SM	A-2-4, A-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	14-19	Loamy sand, fine sandy loam, loamy fine sand	SM	A-2-4, A-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	19-29	Loamy sand, loamy fine sand, fine sand	SP-SM, SM	A-2, A-2-4	0	0-7	95-100	85-100	70-90	10-30	0-16	NP-0
	29-72	Stratified sand to loamy fine sand	SM, SP-SM	A-2, A-2-4	0	0-7	95-100	85-100	70-90	10-30	0-16	NP-0
	72-80	Sand, stratified coarse sand to sand to loamy sand	SP-SM, SP	A-3, A-2-4	0	0-7	95-100	85-100	60-90	1-20	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
433D: McMillan-----	0-1	Moderately decomposed plant material	PT	A-8	0	0-7	95-100	85-100	85-100	40-80	---	---
	1-2	Fine sandy loam	SM, ML	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-60	0-21	NP-4
	2-5	Fine sandy loam	SM	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	5-9	Fine sandy loam, very fine sandy loam	SM	A-4, A-2-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	9-14	Fine sandy loam, very fine sandy loam	SM	A-2-4, A-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	14-19	Loamy sand, loamy fine sand, fine sandy loam	SM	A-2-4, A-4	0	0-7	95-100	85-100	70-90	20-50	0-21	NP-4
	19-29	Loamy sand, loamy fine sand, fine sand	SP-SM, SM	A-2, A-2-4	0	0-7	95-100	85-100	70-90	10-30	0-16	NP-0
	29-72	Stratified sand to loamy fine sand	SM, SP-SM	A-2, A-2-4	0	0-7	95-100	85-100	70-90	10-30	0-16	NP-0
	72-80	Stratified coarse sand to sand to loamy sand, sand	SP-SM, SP	A-3, A-2-4	0	0-7	95-100	85-100	60-90	1-20	---	NP
435C: Kalkaska-----	0-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-6	Sand, loamy sand	SP-SM, SP	A-3, A-2-4	0	0-5	95-100	90-100	50-85	0-15	---	NP
	6-8	Sand	SP, SP-SM	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	8-17	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	17-32	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	32-80	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
435C: Waiska-----	0-1	Moderately decomposed plant material	PT	A-8	0-15	0-30	100	100	100	90-100	---	---
	1-4	Sandy loam, loamy sand, gravelly loamy sand	SP, SM, GP	A-2-4, A-3, A-1	0-15	0-30	35-95	30-90	20-65	0-25	0-23	NP-3
	4-8	Gravelly sand, gravelly loamy sand, very cobbly loamy sand	SM, GP, SP, SP-SM	A-1, A-2-4, A-3	0-15	0-30	35-95	30-90	20-65	0-25	0-30	NP-3
	8-18	Very gravelly sand, very gravelly loamy sand, very cobbly sand	GP, SP, SP-SM	A-1, A-3	0-15	0-30	35-80	30-75	10-55	0-10	0-24	NP-2
	18-35	Very gravelly sand, very gravelly coarse sand, stratified sand to gravelly sand	SP-SM, SP, GP	A-1, A-3	0-15	0-30	15-80	10-75	5-55	0-10	0-19	NP-2
	35-61	Extremely gravelly sand, extremely gravelly coarse sand, stratified coarse sand to very gravelly sand	GP, SP-SM, SP	A-1, A-3	0-15	0-30	15-80	10-75	5-55	0-10	0-19	NP-2

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
435D: Kalkaska-----	0-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-6	Sand, loamy sand	SP-SM, SP	A-3, A-2-4	0	0-5	95-100	90-100	50-85	0-15	---	NP
	6-8	Sand	SP, SP-SM	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	8-17	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	17-32	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	32-80	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
Waiska-----	0-1	Moderately decomposed plant material	PT	A-8	0-15	0-30	100	100	100	90-100	---	---
	1-4	Sandy loam, loamy sand, gravelly loamy sand	SP, SM, GP	A-2-4, A-3, A-1	0-15	0-30	35-95	30-90	20-65	0-25	0-23	NP-3
	4-8	Gravelly sand, gravelly loamy sand, very cobbly loamy sand	SM, GP, SP, SP-SM	A-1, A-2-4, A-3	0-15	0-30	35-95	30-90	20-65	0-25	0-30	NP-3
	8-18	Very gravelly sand, very gravelly loamy sand, very cobbly sand	GP, SP, SP-SM	A-1, A-3	0-15	0-30	35-80	30-75	10-55	0-10	0-24	NP-2
	18-35	Very gravelly sand, very gravelly coarse sand, stratified sand to gravelly sand	SP-SM, SP, GP	A-1, A-3	0-15	0-30	15-80	10-75	5-55	0-10	0-19	NP-2
	35-61	Extremely gravelly sand, extremely gravelly coarse sand, stratified coarse sand to very gravelly sand	GP, SP-SM, SP	A-1, A-3	0-15	0-30	15-80	10-75	5-55	0-10	0-19	NP-2

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
435E: Kalkaska-----	In				Pct	Pct					Pct	
	0-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	NP
	2-6	Loamy sand, sand	SP-SM, SP	A-3, A-2-4	0	0-5	95-100	90-100	50-85	0-15	---	NP
	6-8	Sand	SP, SP-SM	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	8-17	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	17-32	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
	32-80	Sand	SP-SM, SP	A-3	0	0-5	95-100	90-100	50-85	0-15	---	NP
Waiska-----	0-1	Moderately decomposed plant material	PT	A-8	0-15	0-30	100	100	100	90-100	---	---
	1-4	Sandy loam, loamy sand, gravelly loamy sand	SP, SM, GP	A-2-4, A-3, A-1	0-15	0-30	35-95	30-90	20-65	0-25	0-23	NP-3
	4-8	Gravelly sand, gravelly loamy sand, very cobbly loamy sand	SM, GP, SP, SP-SM	A-1, A-2-4, A-3	0-15	0-30	35-95	30-90	20-65	0-25	0-30	NP-3
	8-18	Very gravelly sand, very gravelly loamy sand, very cobbly sand	GP, SP, SP-SM	A-1, A-3	0-15	0-30	35-80	30-75	10-55	0-10	0-24	NP-2
	18-35	Very gravelly sand, very gravelly coarse sand, stratified sand to gravelly sand	SP-SM, SP, GP	A-1, A-3	0-15	0-30	15-80	10-75	5-55	0-10	0-19	NP-2
	35-61	Extremely gravelly sand, extremely gravelly coarse sand, stratified coarse sand to very gravelly sand	GP, SP-SM, SP	A-1, A-3	0-15	0-30	15-80	10-75	5-55	0-10	0-19	NP-2

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
437B: Manitowish-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-2	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	2-4	Sandy loam, gravelly fine sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	4-5	Gravelly fine sandy loam, sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	5-11	Sandy loam, gravelly fine sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	11-22	Sandy loam, gravelly fine sandy loam	SM	A-4, A-2-4	0	0-15	75-100	50-100	30-90	10-60	15-25	NP-10
	22-40	Loamy coarse sand, coarse sand, gravelly loamy sand	SM	A-1-b, A-2-4	0	0-15	75-100	50-100	5-60	5-25	0-26	NP-9
	40-80	Coarse sand, gravelly sand	SP-SM, SW-SM	A-1-b, A-3	0	0-15	75-100	50-100	0-60	0-25	0-20	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
437B: Channing-----	0-2	Slightly decomposed plant material	PT	A-8	0-10	0-25	100	100	100	90-100	---	---
	2-6	Very fine sandy loam, fine sandy loam	ML	A-4	0-10	0-25	95-100	85-100	50-85	25-75	15-25	NP-6
	6-7	Very fine sandy loam, fine sandy loam	ML	A-4	0-10	0-25	95-100	85-100	50-85	25-75	15-25	NP-6
	7-16	Very fine sandy loam, fine sandy loam	ML	A-4	0-10	0-25	95-100	85-100	50-85	25-75	15-25	NP-7
	16-24	Fine sandy loam, very fine sandy loam, cobbly fine sandy loam	ML	A-4	0-10	0-25	95-100	85-100	50-85	25-75	15-25	NP-6
	24-29	Gravelly sand, very gravelly sand, stratified coarse sand to sand to loamy sand	SP, SP-SM, SM	A-3, A-1	0-5	0-10	65-85	35-75	20-52	0-15	0-14	NP
	29-62	Gravelly sand, very gravelly sand, stratified coarse sand to sand to loamy sand	SM, SP, SP-SM	A-1, A-3	0-5	0-10	65-85	35-75	20-52	0-15	0-14	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
448F: Rockland-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	NP
	1-5	Silt loam, loam	CL-ML, ML	A-4	0-5	0-7	90-100	85-100	70-95	60-90	0-25	NP-7
	5-22	Silt loam, loam, silty clay loam	CL-ML, ML, CL	A-4, A-6	0-5	0-7	90-100	85-100	70-95	60-90	17-39	1-18
	22-80	Silt loam, silty clay loam, loam	CL-ML, CL, ML	A-6, A-4	0-5	0-7	90-100	85-100	70-95	60-90	17-39	1-18
Rock outcrop.												
449C: Flintsteel-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-5	Silt loam	CL, CH	A-7-6, A-6	0	0-3	95-100	90-100	85-100	55-95	35-66	15-39
	5-9	Silt loam, fine sandy loam, loam	ML	A-4	0	0-8	95-100	85-100	55-95	40-80	0-21	NP-4
	9-12	Silt loam, fine sandy loam, loam	CL-ML, CL, ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	20-34	3-14
	12-16	Fine sandy loam, loam, silt loam	CL, CL-ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	21-34	4-14
	16-22	Loam, silt loam, fine sandy loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	80-100	50-95	35-80	21-36	4-15
	22-36	Loam, silt loam, clay loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	25-37	7-16
	36-48	Loam, silt loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	21-30	4-11
	48-80	Silt loam, loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-90	21-30	4-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
449C:												
Minocqua-----	0-4	Muck	PT	A-8	0	0	100	100	100	100	---	NP
	4-15	Silt loam, loam, sandy loam, fine sandy loam, very fine sandy loam	CL, ML, SC, SM	A-2, A-4	0	0-7	80-100	75-100	45-100	25-90	0-35	NP-13
	15-28	Loam, gravelly sandy loam, fine sandy loam	CL, ML, SC, SM	A-1, A-2, A-4	0	0-7	55-100	50-100	30-95	15-80	0-28	NP-9
	28-60	Stratified sand to gravelly coarse sand	GP, GP-GM, SP, SP-SM	A-1, A-2, A-3	0	0-7	45-100	40-95	15-65	0-15	0-14	NP
452F:												
Rockland-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	NP
	1-5	Silt loam, loam	CL-ML, ML	A-4	0-5	0-7	90-100	85-100	70-95	60-90	0-25	NP-7
	5-23	Silt loam, loam, silty clay loam	CL-ML, ML, CL	A-4, A-6	0-5	0-7	90-100	85-100	70-95	60-90	17-39	1-18
	23-80	Silt loam, loam, silty clay loam	CL-ML, CL, ML	A-4, A-6	0-5	0-7	90-100	85-100	70-95	60-90	17-39	1-18

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
460B: Belding-----	0-1	Highly decomposed plant material	PT	A-8	0	0-7	100	100	100	100	---	NP
	1-4	Fine sandy loam, loamy fine sand, loamy sand, sandy loam	SM, SC-SM, ML	A-2-4, A-4	0	0-7	95-100	85-100	45-98	25-55	0-28	NP-9
	4-9	Loamy fine sand, fine sandy loam, loamy sand, sandy loam	SM, ML, SC-SM	A-2-4, A-4	0	0-7	95-100	85-100	40-98	25-55	0-28	NP-9
	9-14	Loamy fine sand, fine sandy loam, loamy sand, sandy loam	ML, SC-SM, SM	A-2-4, A-4	0	0-7	95-100	85-100	40-98	25-55	0-28	NP-9
	14-19	Loamy sand, sandy loam, fine sandy loam, loamy fine sand, fine sand	ML, SC-SM, SM	A-2-4, A-4	0	0-7	95-100	85-100	40-98	25-55	0-28	NP-9
	19-22	Sandy loam, loamy fine sand, loamy sand, fine sand, fine sandy loam	ML, SC-SM, SM	A-2-4, A-4	0	0-7	95-100	85-100	40-98	15-55	0-28	NP-9
	22-34	Loam, silty clay loam, clay loam, silt loam	CL-ML, CL	A-4, A-6	0	0-7	95-100	85-100	35-98	20-95	21-48	4-25
	34-36	Silt loam, silty clay loam, clay loam, loam	CL, CL-ML	A-4, A-6	0	0-7	95-100	85-100	35-98	20-95	21-48	4-25
	36-80	Clay loam, loam, silt loam, silty clay loam	CL, CL-ML	A-4, A-6	0	0-7	95-100	85-100	35-98	20-95	21-48	4-25

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
					4	10	40	200				
	In				Pct	Pct					Pct	
460B: Manido-----	0-3	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	3-9	Sand, fine sand	SM, SP-SM	A-2-4, A-3	0	0-1	95-100	95-100	60-95	5-40	0-21	NP-5
	9-11	Fine sand, sand	SM, SP-SM	A-2-4, A-3	0-1	0-1	95-100	95-100	60-95	5-40	0-21	NP-5
	11-17	Sand, fine sand	SM, SP-SM	A-2-4, A-3	0-1	0-1	95-100	95-100	60-95	5-40	0-21	NP-5
	17-37	Sand, fine sand	SM, SP-SM	A-2-4, A-3	0-1	0-1	95-100	95-100	60-95	1-40	0-21	NP-5
	37-60	Stratified fine sand to sand to very fine sand, stratified loamy sand to loamy fine sand	CL-ML, ML, SP-SM, SM	A-3, A-2-4	0-1	0-1	95-100	95-100	50-95	1-50	0-21	NP-5
	60-80	Stratified fine sand to sand to very fine sand	CL-ML, ML, SP-SM, SM	A-3, A-2-4	0-1	0-1	95-100	95-100	50-95	1-50	0-21	NP-5
461B: Loggerhead-----	0-4	Loam, fine sandy loam, loamy sand	ML, SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-60	0-48	NP-17
	4-5	Gravelly fine sandy loam, loamy sand, silt loam	ML, SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-60	0-45	NP-17
	5-15	Fine sandy loam, sand, gravelly loam, loamy sand	SM, ML, SP-SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-60	0-41	NP-17
	15-38	Gravelly loam, silt loam, gravelly fine sandy loam	CL-ML, ML, SM	A-4	0	0-7	90-100	85-100	50-95	40-75	0-37	NP-17
	38-56	Loam, silt loam, gravelly fine sandy loam	CL, CL-ML, ML	A-4	0	0-7	90-100	85-100	70-95	40-90	16-36	2-17
	56-80	Loam, clay loam, silt loam	CL-ML, CL	A-6, A-4	0	0-7	90-100	85-100	70-95	40-90	20-44	6-25

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
462C: Nonesuch-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-4	Gravelly loam, loam, gravelly silt loam	CL-ML, CL, ML, SM, SC- SM	A-4	0	0-7	70-100	55-95	50-90	25-80	0-30	NP-11
	4-11	Loam, channery silt loam, fine sandy loam	CL-ML, CL, ML, SM, SC- SM	A-4	0	0-7	70-100	55-95	50-90	25-80	0-30	NP-11
	11-16	Gravelly loam, silt loam, very gravelly fine sandy loam, very channery sandy loam	CL-ML, CL, SC-SM, ML, SM, GM	A-2-4, A-4	0	0-7	45-100	30-90	25-85	15-70	0-30	NP-11
	16-23	Very gravelly fine sandy loam, very channery loam, silt loam, gravelly sandy loam	CL, CL-ML, ML, SC, SC- SM, GM	A-2-4, A-4	0	0-7	45-100	30-90	25-85	15-70	0-30	NP-11
	23-34	Silt loam, fine sandy loam, gravelly loam, channery silt loam	GM, CL, CL- ML, ML, SM, SC-SM	A-4	0	0-7	45-100	30-90	25-85	15-70	0-30	NP-11
	34-50	Silt loam	GC-GM, GM, GC	A-1-a, A-2-4	0-10	0-10	5-60	5-50	5-50	5-40	0-30	NP-11
	50	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
	Rock outcrop.											
509: Cathro-----	0-6	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	6-31	Muck	PT	A-8	0	0	100	90-100	90-100	40-100	---	NP
	31-80	Silt loam, silty clay loam, very fine sandy loam, sandy loam, loam, fine sandy loam	CL, SC-SM, SM, ML, CL- ML	A-6, A-4	0	0-10	85-100	65-100	50-85	30-55	16-39	1-18

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
509: Minocqua-----	0-4	Muck	PT	A-8	0	0	100	100	100	100	---	NP
	4-15	Silt loam, loam, sandy loam, fine sandy loam, very fine sandy loam	CL, ML, SC, SM	A-2, A-4	0	0-7	80-100	75-100	45-100	25-90	0-35	NP-13
	15-28	Loam, gravelly sandy loam, fine sandy loam	CL, ML, SC, SM	A-1, A-2, A-4	0	0-7	55-100	50-100	30-95	15-80	0-28	NP-9
	28-60	Stratified sand to gravelly coarse sand	GP, GP-GM, SP, SP-SM	A-1, A-2, A-3	0	0-7	45-100	40-95	15-65	0-15	0-14	NP
511A: Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Cobbly very fine sandy loam, gravelly fine sandy loam, silt loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Cobbly very fine sandy loam, sandy loam, silt loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
					4	10	40	200				
511A: (Gogebic)	In				Pct	Pct					Pct	
	12-20	Cobbly sandy loam, gravelly silt loam, fine sandy loam, very fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Cobbly sandy loam, loamy fine sand, gravelly loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	49-54	Gravelly loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Gravelly sandy loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Cobbly sandy loam, gravelly fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
511A: Tula-----	In				Pct	Pct					Pct	
	0-1	Highly decomposed plant material	PT	A-8	0-7	0-30	100	100	100	100	---	NP
	1-5	Fine sandy loam, cobbly very fine sandy loam	CL-ML, ML, SM	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	5-8	Fine sandy loam, cobbly very fine sandy loam	CL-ML, SM, ML	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	8-20	Cobbly very fine sandy loam, fine sandy loam	CL-ML, SM, ML	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	20-28	Gravelly sandy loam, fine sandy loam	ML, CL-ML, SM	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	28-37	Loamy sand, gravelly sandy loam, gravelly loam, fine sandy loam	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-28	NP-9
	37-62	Gravelly loamy sand, gravelly sandy loam, gravelly loam, fine sandy loam	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-30	NP-11
	62-80	Gravelly sandy loam, fine sandy loam	ML, SC-SM, SM	A-4	0-7	1-23	85-100	65-92	40-80	20-55	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
511A: Chabeneau-----	In										Pct	
	0-1	Moderately decomposed plant material	PT	A-8	0-2	0-8	100	100	100	90-100	---	---
	1-2	Fine sandy loam, silt loam	ML, CL-ML	A-4	0-2	0-8	90-100	75-100	70-100	50-90	0-20	NP-4
	2-5	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	ML, CL-ML	A-4	0-2	0-8	90-100	75-100	70-100	50-90	0-20	NP-4
	5-10	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	CL-ML, ML	A-4	0-2	0-8	90-100	75-100	50-100	30-90	0-20	NP-4
	10-22	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	CL-ML, ML	A-4	0-2	0-8	89-100	75-100	50-100	30-90	0-20	NP-4
	22-30	Gravelly sand, gravelly loamy sand, very gravelly loamy coarse sand, sand	GP, SP-SM, SP, SM, GW	A-3, A-1, A- 2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP
	30-48	Stratified coarse sand to very gravelly coarse sand	GP, GW, SM, SP, SP-SM	A-3, A-1, A- 2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP
	48-121	Stratified sand to gravelly sand, stratified coarse sand to very gravelly coarse sand	GP, GW, SM, SP, SP-SM	A-3, A-1, A- 2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
519B: Gogebic-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Sandy loam, gravelly silt loam, fine sandy loam, cobbly very fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Gravelly silt loam, fine sandy loam, sandy loam, cobbly very fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Gravelly silt loam, sandy loam, cobbly very fine sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Cobbly sandy loam, gravelly silt loam, fine sandy loam, very fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Cobbly sandy loam, loamy fine sand, gravelly loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index	
			Unified	AASHTO	>10	3-10							
					inches	inches	4	10	40	200			
	In				Pct	Pct					Pct		
519B: (Gogebic)	49-54	Gravelly loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9	
	54-68	Gravelly sandy loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9	
	68-80	Sandy loam, cobbly sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9	
Karlin-----	0-1	Moderately decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP	
	1-4	Fine sandy loam, loamy fine sand, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-20	NP-10	
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-40	NP-12	
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-55	0-23	NP-6	
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	0-19	NP-2	
	519C: Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Cobbly very fine sandy loam, sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9	

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
519C: (Gogebic)	In				Pct	Pct					Pct	
	5-8	Gravelly silt loam, fine sandy loam, cobbly very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Cobbly very fine sandy loam, gravelly silt loam, fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, cobbly sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Cobbly sandy loam, loamy fine sand, gravelly loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	49-54	Gravelly loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Cobbly sandy loam, fine sandy loam, gravelly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Gravelly fine sandy loam, cobbly sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
519C: Karlin-----	0-1	Moderately decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Fine sandy loam, loamy fine sand, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-20	NP-10
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-40	NP-12
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-55	0-23	NP-6
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	0-19	NP-2
519D: Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Cobbly very fine sandy loam, sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Cobbly very fine sandy loam, gravelly silt loam, fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Cobbly very fine sandy loam, sandy loam, fine sandy loam, gravelly silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
519D: (Gogebic)	In				Pct	Pct					Pct	
	12-20	Very fine sandy loam, cobbly sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Gravelly fine sandy loam, loamy sand, sandy loam, cobbly loamy very fine sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Cobbly sandy loam, loamy fine sand, gravelly loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	49-54	Fine sandy loam, gravelly loam, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Cobbly sandy loam, gravelly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Gravelly fine sandy loam, cobbly sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
					4	10	40	200				
	In				Pct	Pct					Pct	
519D: Karlin-----	0-1	Highly decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-20	NP-10
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-40	NP-12
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-55	0-23	NP-6
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	0-19	NP-2
522. Pits, sand and gravel												
523D: Gogebic, sandy substratum----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Gravelly silt loam, fine sandy loam, sandy loam, cobbly very fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Silt loam, gravelly fine sandy loam, cobbly very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
					4	10	40	200				
523D: (Gogebic)	In				Pct	Pct					Pct	
	8-12	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Fine sandy loam, gravelly silt loam, cobbly sandy loam, very fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Cobbly sandy loam, loamy fine sand, gravelly loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	49-54	Fine sandy loam, cobbly sandy loam, gravelly loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Gravelly sandy loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sand, gravelly sand	SP, SP-SM	A-2-4, A-3	0-15	0-30	85-100	55-95	35-70	0-40	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
523D: Karlin-----	0-1	Highly decomposed plant material	PT	A-8	0-1	0-5	100	100	100	100	---	NP
	1-4	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-20	NP-10
	4-15	Loamy fine sand, fine sandy loam, sandy loam	SM	A-2-4	0-1	0-5	90-100	75-100	40-100	10-55	0-40	NP-12
	15-29	Loamy fine sand, loamy sand, fine sand, sand	SM, SP-SM, SP	A-3, A-2-4	0-1	0-5	90-100	75-100	35-100	0-55	0-23	NP-6
	29-80	Sand	SP, SP-SM	A-3	0-1	0-5	90-100	75-100	35-70	0-15	0-19	NP-2
524C: Waiska-----	0-1	Moderately decomposed plant material	PT	A-8	0-15	0-30	100	100	100	90-100	---	---
	1-4	Sandy loam, loamy sand, gravelly loamy sand	SP, SM, GP	A-2-4, A-3, A-1	0-15	0-30	35-95	30-90	20-65	0-25	0-23	NP-3
	4-8	Gravelly sand, gravelly loamy sand, very cobbly loamy sand	SM, GP, SP, SP-SM	A-1, A-2-4, A-3	0-15	0-30	35-95	30-90	20-65	0-25	0-30	NP-3
	8-18	Very gravelly sand, very gravelly loamy sand, very cobbly sand	GP, SP, SP-SM	A-1, A-3	0-15	0-30	35-80	30-75	10-55	0-10	0-24	NP-2
	18-35	Very gravelly sand, very gravelly coarse sand, stratified sand to gravelly sand	SP-SM, SP, GP	A-3, A-1	0-15	0-30	15-80	10-75	5-55	0-10	0-19	NP-2

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
524C: (Waiska)	35-61	Extremely gravelly sand, extremely gravelly coarse sand, stratified coarse sand to very gravelly sand	GP, SP-SM, SP	A-1, A-3	0-15	0-30	15-80	10-75	5-55	0-10	0-19	NP-2
Amasa-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-4	Gravelly silt loam, gravelly very fine sandy loam, cobbly fine sandy loam	CL-ML	A-4	0-3	0-50	58-100	55-100	30-90	10-70	22-33	6-14
	4-7	Gravelly fine sandy loam, gravelly very fine sandy loam, gravelly loam, silt loam	CL-ML	A-4	0-3	0-50	58-100	55-100	50-100	40-90	20-30	5-12
	7-23	Gravelly fine sandy loam, gravelly loam, gravelly silt loam, very fine sandy loam	CL-ML	A-4	0-3	0-50	53-100	50-100	45-100	15-80	22-33	6-14
	23-28	Gravelly very fine sandy loam, gravelly loam, gravelly silt loam, fine sandy loam	SC-SM	A-4	0-3	0-50	58-100	55-100	30-90	10-70	22-33	6-14
	28-41	Gravelly coarse sand, sand	SP-SM, SP, SM, GM	A-2-4, A-1-b, A-1-a	0-8	0-50	27-100	25-100	0-90	0-40	12-21	NP-5
	41-80	Very gravelly sand, gravelly coarse sand, gravelly sand	GM, SP-SM	A-1-b, A-2-4, A-1-a	0-8	0-50	26-100	25-100	0-90	0-40	12-21	NP-5

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
524D: Waiska-----	0-1	Moderately decomposed plant material	PT	A-8	0-15	0-30	100	100	100	90-100	---	---
	1-4	Sandy loam, loamy sand, gravelly loamy sand	SP, SM, GP	A-2-4, A-3, A-1	0-15	0-30	35-95	30-90	20-65	0-25	0-23	NP-3
	4-8	Gravelly sand, gravelly loamy sand, very cobbly loamy sand	SM, GP, SP, SP-SM	A-1, A-2-4, A-3	0-15	0-30	35-95	30-90	20-65	0-25	0-30	NP-3
	8-18	Very gravelly sand, very gravelly loamy sand, very cobbly sand	GP, SP, SP-SM	A-1, A-3	0-15	0-30	35-80	30-75	10-55	0-10	0-24	NP-2
	18-35	Very gravelly sand, very gravelly coarse sand, stratified sand to gravelly sand	SP-SM, SP, GP	A-1, A-3	0-15	0-30	15-80	10-75	5-55	0-10	0-19	NP-2
	35-61	Extremely gravelly sand, extremely gravelly coarse sand, stratified coarse sand to very gravelly sand	GP, SP-SM, SP	A-1, A-3	0-15	0-30	15-80	10-75	5-55	0-10	0-19	NP-2

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
							4	10	40	200		
	In				Pct	Pct					Pct	
524D: Amasa-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-4	Gravelly very fine sandy loam, cobbly fine sandy loam, gravelly silt loam	CL-ML	A-4	0-3	0-50	58-100	55-100	30-90	10-70	22-33	6-14
	4-7	Gravelly loam, gravelly fine sandy loam, gravelly very fine sandy loam, silt loam	CL-ML	A-4	0-3	0-50	58-100	55-100	50-100	40-90	20-30	5-12
	7-23	Very fine sandy loam, gravelly loam, gravelly silt loam, gravelly fine sandy loam	CL-ML	A-4	0-3	0-50	53-100	50-100	45-100	15-80	22-33	6-14
	23-28	Fine sandy loam, gravelly very fine sandy loam, gravelly loam, gravelly silt loam	SC-SM	A-4	0-3	0-50	58-100	55-100	30-90	10-70	22-33	6-14
	28-41	Gravelly coarse sand, sand	SP-SM, SP, SM, GM	A-2-4, A-1-b, A-1-a	0-8	0-50	27-100	25-100	0-90	0-40	12-21	NP-5
	41-80	Gravelly coarse sand, gravelly sand, very gravelly sand	GM, SP-SM	A-1-b, A-2-4, A-1-a	0-8	0-50	26-100	25-100	0-90	0-40	12-21	NP-5

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
524E: Waiska-----	0-1	Moderately decomposed plant material	PT	A-8	0-15	0-30	100	100	100	90-100	---	---
	1-4	Sandy loam, loamy sand, gravelly loamy sand	SP, SM, GP	A-2-4, A-3, A-1	0-15	0-30	35-95	30-90	20-65	0-25	0-23	NP-3
	4-8	Gravelly sand, gravelly loamy sand, very cobbly loamy sand	SM, GP, SP, SP-SM	A-1, A-2-4, A-3	0-15	0-30	35-95	30-90	20-65	0-25	0-30	NP-3
	8-18	Very gravelly sand, very gravelly loamy sand, very cobbly sand	GP, SP, SP-SM	A-1, A-3	0-15	0-30	35-80	30-75	10-55	0-10	0-24	NP-2
	18-35	Very gravelly sand, very gravelly coarse sand, stratified sand to gravelly sand	SP-SM, SP, GP	A-1, A-3	0-15	0-30	15-80	10-75	5-55	0-10	0-19	NP-2
	35-61	Extremely gravelly sand, extremely gravelly coarse sand, stratified coarse sand to very gravelly sand	GP, SP-SM, SP	A-1, A-3	0-15	0-30	15-80	10-75	5-55	0-10	0-19	NP-2

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
					4	10	40	200				
	In				Pct	Pct					Pct	
524E: Amasa-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-4	Cobbly fine sandy loam, gravelly very fine sandy loam, gravelly silt loam	CL-ML	A-4	0-3	0-50	58-100	55-100	30-90	10-70	22-33	6-14
	4-7	Gravelly very fine sandy loam, gravelly fine sandy loam, gravelly loam, silt loam	CL-ML	A-4	0-3	0-50	58-100	55-100	50-100	40-90	20-30	5-12
	7-23	Gravelly loam, very fine sandy loam, gravelly silt loam, gravelly fine sandy loam	CL-ML	A-4	0-3	0-50	53-100	50-100	45-100	15-80	22-33	6-14
	23-28	Gravelly very fine sandy loam, fine sandy loam, gravelly silt loam, gravelly loam	SC-SM	A-4	0-3	0-50	58-100	55-100	30-90	10-70	22-33	6-14
	28-41	Sand, gravelly coarse sand	SP-SM, SP, SM, GM	A-2-4, A-1-b, A-1-a	0-8	0-50	27-100	25-100	0-90	0-40	12-21	NP-5
	41-80	Gravelly coarse sand, gravelly sand, very gravelly sand	GM, SP-SM	A-1-b, A-2-4, A-1-a	0-8	0-50	26-100	25-100	0-90	0-40	12-21	NP-5

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
527B: Wakefield-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-4	Loam, silt loam, fine sandy loam	ML	A-4	0	0-7	100	78-95	65-92	45-72	22-47	3-18
	4-7	Fine sandy loam, silt loam, loam	ML, SM, CL-ML	A-4	0	0-7	95-100	78-95	50-90	30-70	0-30	NP-11
	7-10	Silt loam, fine sandy loam, loam	CL-ML, SM, ML	A-4	0	0-7	95-100	78-95	50-90	30-70	0-30	NP-11
	10-16	Loam, silt loam, fine sandy loam	CL-ML, ML, SM	A-4	0	0-7	95-100	78-95	50-90	30-70	0-30	NP-11
	16-26	Loam, sandy loam, fine sandy loam	CL-ML, ML, SM	A-6, A-4	0	0-7	95-100	78-95	65-90	40-75	0-37	NP-16
	26-54	Silt loam, fine sandy loam, loam	CL-ML, SM, ML	A-6, A-4	0	0-7	95-100	78-95	65-90	40-75	0-37	NP-16
	54-70	Loam, sandy loam, fine sandy loam	CL-ML, ML, SM	A-4	0	0-7	95-100	78-95	50-90	30-70	0-30	NP-11
	70-80	Fine sandy loam, very fine sandy loam, loam	CL-ML, ML, SM	A-4	0	0-7	95-100	78-95	50-90	30-70	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
527C: Wakefield-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-4	Loam, silt loam, fine sandy loam	ML	A-4	0	0-7	100	78-95	65-92	45-72	22-47	3-18
	4-7	Loam, silt loam, fine sandy loam	CL-ML	A-4	0	0-7	100	78-95	75-95	50-87	0-41	NP-19
	7-10	Fine sandy loam, silt loam, loam	ML	A-4	0	0-7	100	78-95	65-92	45-72	22-47	3-18
	10-16	Fine sandy loam, silt loam, loam	SM	A-4	0	0-7	100	78-95	55-82	30-55	0-37	NP-13
	16-26	Sandy loam, fine sandy loam, loam	SM	A-4	0	0-7	100	78-95	55-82	30-55	0-32	NP-13
	26-54	Fine sandy loam, loam, silt loam	ML	A-4	0	0-7	82-100	78-95	75-93	50-84	0-38	NP-19
	54-70	Sandy loam, loam, fine sandy loam	SM	A-4	0	0-7	100	78-95	55-82	30-55	0-30	NP-13
	70-80	Very fine sandy loam, loam, fine sandy loam	SM	A-4	0	0-7	100	78-95	55-82	30-55	0-30	NP-13

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
527D: Wakefield-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-4	Silt loam, loam, fine sandy loam	ML	A-4	0	0-7	100	78-95	65-92	45-72	22-47	3-18
	4-7	Loam, silt loam, fine sandy loam	CL-ML	A-4	0	0-7	100	78-95	75-95	50-87	0-41	NP-19
	7-10	Loam, silt loam, fine sandy loam	ML	A-4	0	0-7	100	78-95	65-92	45-72	22-47	3-18
	10-16	Silt loam, loam, fine sandy loam	SM	A-4	0	0-7	100	78-95	55-82	30-55	0-37	NP-13
	16-26	Fine sandy loam, loam, sandy loam	SM	A-4	0	0-7	100	78-95	55-82	30-55	0-32	NP-13
	26-54	Fine sandy loam, silt loam, loam	ML	A-4	0	0-7	82-100	78-95	75-93	50-84	0-38	NP-19
	54-70	Sandy loam, fine sandy loam, loam	SM	A-4	0	0-7	100	78-95	55-82	30-55	0-30	NP-13
	70-80	Very fine sandy loam, loam, fine sandy loam	SM	A-4	0	0-7	100	78-95	55-82	30-55	0-30	NP-13

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
528B: Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Gravelly fine sandy loam, silt loam, cobbly very fine sandy loam, sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Cobbly very fine sandy loam, silt loam, gravelly fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Silt loam, gravelly fine sandy loam, cobbly very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, gravelly silt loam, cobbly sandy loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Fine sandy loam, cobbly sandy loam, loamy fine sand, gravelly loamy fine sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
528B: (Gogebic)	49-54	Fine sandy loam, gravelly loam, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Gravelly sandy loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sandy loam, cobbly sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
Annalake-----	0-9	Very fine sandy loam, sandy loam	ML	A-4	0	0	89-100	85-100	70-100	25-80	0-41	NP-13
	9-16	Fine sandy loam	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	16-31	Stratified loamy very fine sand to silt loam to loamy fine sand	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	31-48	Stratified sand to fine sand to loamy fine sand to silt loam	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7
	48-61	Stratified sand to fine sand to loamy fine sand to silt loam	SC-SM, ML, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-30	NP-11
	61-80	Stratified fine sand to loamy fine sand to silt loam to silt	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
528C: Gogebic-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Silt loam, gravelly fine sandy loam, cobbly very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Fine sandy loam, gravelly silt loam, very fine sandy loam, cobbly sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Gravelly fine sandy loam, cobbly loamy very fine sand, sandy loam, loamy sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Cobbly sandy loam, gravelly loamy fine sand, fine sandy loam, loamy fine sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
528C: (Gogebic)	49-54	Fine sandy loam, cobbly sandy loam, gravelly loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Cobbly sandy loam, gravelly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Gravelly fine sandy loam, cobbly sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
Annalake-----	0-9	Very fine sandy loam, sandy loam	ML	A-4	0	0	89-100	85-100	70-100	25-80	0-41	NP-13
	9-16	Fine sandy loam	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	16-31	Stratified loamy very fine sand to silt loam to loamy fine sand	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	31-48	Stratified sand to fine sand to loamy fine sand to silt loam	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7
	48-61	Stratified sand to fine sand to loamy fine sand to silt loam	SC-SM, ML, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-30	NP-11
	61-80	Stratified fine sand to loamy fine sand to silt loam to silt	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
528D: Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Silt loam, gravelly fine sandy loam, cobbly very fine sandy loam, sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Gravelly fine sandy loam, silt loam, cobbly very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Sandy loam, cobbly very fine sandy loam, silt loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Fine sandy loam, gravelly silt loam, cobbly sandy loam, very fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, gravelly fine sandy loam, cobbly loamy very fine sand, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Cobbly sandy loam, loamy fine sand, gravelly loamy fine sand, fine sandy	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
528D: (Gogebic)	49-54	Gravelly loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Gravelly sandy loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sandy loam, cobbly sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
Annalake-----	0-9	Sandy loam, very fine sandy loam	ML	A-4	0	0	89-100	85-100	70-100	25-80	0-41	NP-13
	9-16	Fine sandy loam	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	16-31	Stratified loamy very fine sand to silt loam to loamy fine sand	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	31-48	Stratified sand to fine sand to loamy fine sand to silt loam	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7
	48-61	Stratified sand to fine sand to loamy fine sand to silt loam	SC-SM, ML, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-30	NP-11
	61-80	Stratified fine sand to loamy fine sand to silt loam to silt	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
551B: Gogebic-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Cobbly very fine sandy loam, silt loam, gravelly fine sandy loam, sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Cobbly very fine sandy loam, sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, cobbly sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Cobbly sandy loam, gravelly loamy fine sand, loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
551B: (Gogebic)	49-54	Fine sandy loam, cobbly sandy loam, gravelly loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Gravelly sandy loam, fine sandy loam, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Cobbly sandy loam, gravelly fine sandy loam, sandy loam	SM, ML	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
Dishno-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-3	Cobbly fine sandy loam, cobbly very fine sandy loam, cobbly silt loam	ML, SM, CL-ML	A-4	0-25	0-25	95-100	85-98	50-90	45-65	0-28	NP-9
	3-9	Cobbly very fine sandy loam, cobbly silt loam, fine sandy loam	ML, SM, CL-ML	A-4	0-25	0-25	95-100	85-98	50-90	45-65	0-28	NP-9
	9-10	Cobbly fine sandy loam, cobbly loam, silt loam	ML, SM, CL-ML, SC-SM	A-4	0-25	0-25	95-100	85-98	50-90	45-65	0-28	NP-9
	10-18	Cobbly fine sandy loam, cobbly very fine sandy loam	SM, ML, SC-SM, CL-ML	A-4	0-25	0-25	95-100	85-98	45-90	30-60	0-28	NP-9
	18-22	Cobbly very fine sandy loam, cobbly fine sandy loam, cobbly loamy sand	SM, CL-ML, ML, SC-SM	A-4, A-2-4	0-25	0-25	95-100	85-98	45-90	10-50	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
551B: (Dishno)	22-29	Cobbly loamy sand, very cobbly loamy sand, very stony loamy sand	SM	A-2-4	0-25	0-25	85-100	65-85	25-70	10-30	0-25	NP-7
	29-46	Very cobbly loamy sand, cobbly loamy sand, very stony loamy sand	SM	A-2-4	0-25	0-25	85-100	65-85	25-70	10-30	0-25	NP-7
	46-80	Bedrock	---	---	---	---	---	---	---	---	---	---
566. Beach, rubbly												
576B: Flintsteel-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-5	Silt loam	CL, CH	A-7-6, A-6	0	0-3	95-100	90-100	85-100	55-95	35-66	15-39
	5-9	Loam, fine sandy loam, silt loam	ML	A-4	0	0-8	95-100	85-100	55-95	40-80	0-21	NP-4
	9-12	Loam, fine sandy loam, silt loam	CL-ML, CL, ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	20-34	3-14
	12-16	Silt loam, fine sandy loam, loam	CL, CL-ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	21-34	4-14
	16-22	Silt loam, loam, fine sandy loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	80-100	50-95	35-80	21-36	4-15
	22-36	Loam, silt loam, clay loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	25-37	7-16
	36-48	Loam, silt loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	21-30	4-11
	48-80	Loam, silt loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-90	21-30	4-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
576B: Loggerhead-----	0-4	Loamy sand, fine sandy loam, loam	ML, SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-80	15-30	NP-10
	4-5	Loamy sand, silt loam, fine sandy loam	ML, SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-80	15-25	NP-10
	5-15	Loam, sand, loamy sand, fine sandy loam	SM, ML, SP-SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-80	15-30	NP-10
	15-38	Gravelly fine sandy loam, silt loam, gravelly loam	CL-ML, ML, SM	A-4	0	0-7	90-100	85-100	50-95	40-75	15-25	NP-10
	38-56	Fine sandy loam, loam, silt loam	CL, CL-ML, ML	A-4	0	0-7	90-100	85-100	70-95	40-90	15-25	NP-10
	56-80	Clay loam, silt loam, loam	CL-ML, CL	A-6, A-4	0	0-7	90-100	85-100	70-95	40-90	20-40	6-22
576C: Flintsteel-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-5	Silt loam	CL, CH	A-7-6, A-6	0	0-3	95-100	90-100	85-100	55-95	35-66	15-39
	5-9	Silt loam, loam, fine sandy loam	ML	A-4	0	0-8	95-100	85-100	55-95	40-80	0-21	NP-4
	9-12	Loam, fine sandy loam, silt loam	CL-ML, CL, ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	20-34	3-14
	12-16	Silt loam, fine sandy loam, loam	CL, CL-ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	21-34	4-14
	16-22	Loam, fine sandy loam, silt loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	80-100	50-95	35-80	21-36	4-15
	22-36	Silt loam, loam, clay loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	25-37	7-16
	36-48	Silt loam, loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	21-30	4-11
	48-80	Silt loam, loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-90	21-30	4-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
576C: Loggerhead-----	0-4	Loam, loamy sand, fine sandy loam	ML, SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-80	15-30	NP-10
	4-5	Fine sandy loam, loamy sand, silt loam	ML, SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-80	15-25	NP-10
	5-15	Loamy sand, loam, fine sandy loam, sand	SM, ML, SP-SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-80	15-30	NP-10
	15-38	Silt loam, gravelly fine sandy loam, gravelly loam	CL-ML, ML, SM	A-4	0	0-7	90-100	85-100	50-95	40-75	15-25	NP-10
	38-56	Fine sandy loam, loam, silt loam	CL, CL-ML, ML	A-4	0	0-7	90-100	85-100	70-95	40-90	15-25	NP-10
	56-80	Clay loam, loam, silt loam	CL-ML, CL	A-6, A-4	0	0-7	90-100	85-100	70-95	40-90	20-40	6-22
576D: Flintsteel-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-5	Silt loam	CL, CH	A-7-6, A-6	0	0-3	95-100	90-100	85-100	55-95	35-66	15-39
	5-9	Loam, fine sandy loam, silt loam	ML	A-4	0	0-8	95-100	85-100	55-95	40-80	0-21	NP-4
	9-12	Loam, fine sandy loam, silt loam	CL-ML, CL, ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	20-34	3-14
	12-16	Loam, fine sandy loam, silt loam	CL, CL-ML	A-4, A-6	0	0-8	95-100	85-100	55-95	40-80	21-34	4-14
	16-22	Silt loam, fine sandy loam, loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	80-100	50-95	35-80	21-36	4-15
	22-36	Silt loam, loam, clay loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	25-37	7-16
	36-48	Silt loam, loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-85	21-30	4-11
	48-80	Silt loam, loam	CL-ML, CL	A-4, A-6	0	0-8	95-100	85-100	70-95	50-90	21-30	4-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
576D: Loggerhead-----	In				Pct	Pct					Pct	
	0-4	Loam, fine sandy loam, loamy sand	ML, SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-80	15-30	NP-10
	4-5	Silt loam, loamy sand, fine sandy loam	ML, SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-80	15-25	NP-10
	5-15	Loam, loamy sand, sand, fine sandy loam	SM, ML, SP-SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-80	15-30	NP-10
	15-38	Gravelly fine sandy loam, silt loam, gravelly loam	CL-ML, ML, SM	A-4	0	0-7	90-100	85-100	50-95	40-75	15-25	NP-10
	38-56	Silt loam, fine sandy loam, loam	CL, CL-ML, ML	A-4	0	0-7	90-100	85-100	70-95	40-90	15-25	NP-10
	56-80	Loam, silt loam, clay loam	CL-ML, CL	A-6, A-4	0	0-7	90-100	85-100	70-95	40-90	20-40	6-22
577B: Loggerhead-----	0-4	Fine sandy loam, loamy sand, loam	ML, SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-80	15-30	NP-10
	4-5	Fine sandy loam, loamy sand, silt loam	ML, SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-80	15-25	NP-10
	5-15	Sand, loamy sand, fine sandy loam, loam	SM, ML, SP-SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-80	15-30	NP-10
	15-38	Gravelly loam, gravelly fine sandy loam, silt loam	CL-ML, ML, SM	A-4	0	0-7	90-100	85-100	50-95	40-75	15-25	NP-10
	38-56	Loam, silt loam, fine sandy loam	CL, CL-ML, ML	A-4	0	0-7	90-100	85-100	70-95	40-90	15-25	NP-10
	56-80	Loam, clay loam, silt loam	CL-ML, CL	A-6, A-4	0	0-7	90-100	85-100	70-95	40-90	20-40	6-22

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
577B: Chabeneau-----	0-1	Moderately decomposed plant material	PT	A-8	0-2	0-8	100	100	100	90-100	---	---
	1-2	Fine sandy loam, silt loam	ML, CL-ML	A-4	0-2	0-8	90-100	75-100	70-100	50-90	0-20	NP-4
	2-5	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	ML, CL-ML	A-4	0-2	0-8	90-100	75-100	70-100	50-90	0-20	NP-4
	5-10	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	CL-ML, ML	A-4	0-2	0-8	90-100	75-100	50-100	30-90	0-20	NP-4
	10-22	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	CL-ML, ML	A-4	0-2	0-8	89-100	75-100	50-100	30-90	0-20	NP-4
	22-30	Gravelly sand, gravelly loamy sand, very gravelly loamy coarse sand, sand	GP, SP-SM, SP, SM, GW	A-3, A-1, A- 2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP
	30-48	Stratified coarse sand to very gravelly coarse sand	GP, GW, SM, SP, SP-SM	A-3, A-1, A- 2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP
	48-121	Stratified sand to gravelly sand, stratified coarse sand to very gravelly coarse sand	GP, GW, SM, SP, SP-SM	A-3, A-1, A- 2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
577B: Arcadian-----	0-2	Highly decomposed plant material	PT	A-8	0	0	0	0	0	0	---	---
	2-5	Very gravelly fine sandy loam	GC-GM, GM, SM	A-1, A-4, A- 2-4	0-5	10-20	30-75	10-65	5-65	5-45	16-31	1-10
	5-12	Very gravelly fine sandy loam, very gravelly loamy very fine sand	GC-GM, GM, SM	A-1, A-4, A- 2-4	0-5	10-20	30-75	10-65	5-65	5-45	20-40	1-12
	12-22	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
577C: Loggerhead-----	0-4	Loam, loamy sand, fine sandy loam	ML, SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-80	15-30	NP-10
	4-5	Fine sandy loam, loamy sand, silt loam	ML, SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-80	15-25	NP-10
	5-15	Loamy sand, loam, sand, fine sandy loam	SM, ML, SP-SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-80	15-30	NP-10
	15-38	Gravelly fine sandy loam, gravelly loam, silt loam	CL-ML, ML, SM	A-4	0	0-7	90-100	85-100	50-95	40-75	15-25	NP-10
	38-56	Silt loam, loam, fine sandy loam	CL, CL-ML, ML	A-4	0	0-7	90-100	85-100	70-95	40-90	15-25	NP-10
	56-80	Silt loam, clay loam, loam	CL-ML, CL	A-6, A-4	0	0-7	90-100	85-100	70-95	40-90	20-40	6-22

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
577C: Chabeneau-----	In				Pct	Pct					Pct	
	0-1	Moderately decomposed plant material	PT	A-8	0-2	0-8	100	100	100	90-100	---	---
	1-2	Fine sandy loam, silt loam	ML, CL-ML	A-4	0-2	0-8	90-100	75-100	70-100	50-90	0-20	NP-4
	2-5	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	ML, CL-ML	A-4	0-2	0-8	90-100	75-100	70-100	50-90	0-20	NP-4
	5-10	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	CL-ML, ML	A-4	0-2	0-8	90-100	75-100	50-100	30-90	0-20	NP-4
	10-22	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	CL-ML, ML	A-4	0-2	0-8	89-100	75-100	50-100	30-90	0-20	NP-4
	22-30	Gravelly sand, gravelly loamy sand, very gravelly loamy coarse sand, sand	GP, SP-SM, SP, SM, GW	A-3, A-1, A-2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP
	30-48	Stratified coarse sand to very gravelly coarse sand	GP, GW, SM, SP, SP-SM	A-3, A-1, A-2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP
	48-121	Stratified sand to gravelly sand, stratified coarse sand to very gravelly coarse sand	GP, GW, SM, SP, SP-SM	A-3, A-1, A-2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
577C: Arcadian-----	0-2	Highly decomposed plant material	PT	A-8	0	0	0	0	0	0	---	---
	2-5	Very gravelly fine sandy loam	GC-GM, GM, SM	A-1, A-4, A- 2-4	0-5	10-20	30-75	10-65	5-65	5-45	16-31	1-10
	5-12	Very gravelly fine sandy loam, very gravelly loamy very fine sand	GC-GM, GM, SM	A-1, A-4, A- 2-4	0-5	10-20	30-75	10-65	5-65	5-45	20-40	1-12
	12-22	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
577D: Loggerhead-----	0-4	Loam, loamy sand, fine sandy loam	ML, SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-80	15-30	NP-10
	4-5	Loamy sand, fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-80	15-25	NP-10
	5-15	Sand, fine sandy loam, loamy sand, loam	SM, ML, SP-SM	A-2-4, A-4	0	0-7	90-100	85-100	55-95	10-80	15-30	NP-10
	15-38	Gravelly loam, silt loam, gravelly fine sandy loam	CL-ML, ML, SM	A-4	0	0-7	90-100	85-100	50-95	40-75	15-25	NP-10
	38-56	Fine sandy loam, loam, silt loam	CL, CL-ML, ML	A-4	0	0-7	90-100	85-100	70-95	40-90	15-25	NP-10
	56-80	Silt loam, clay loam, loam	CL-ML, CL	A-6, A-4	0	0-7	90-100	85-100	70-95	40-90	20-40	6-22

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
577D: Chabeneau-----	In				Pct	Pct					Pct	
	0-1	Moderately decomposed plant material	PT	A-8	0-2	0-8	100	100	100	90-100	---	---
	1-2	Fine sandy loam, silt loam	ML, CL-ML	A-4	0-2	0-8	90-100	75-100	70-100	50-90	0-20	NP-4
	2-5	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	ML, CL-ML	A-4	0-2	0-8	90-100	75-100	70-100	50-90	0-20	NP-4
	5-10	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	CL-ML, ML	A-4	0-2	0-8	90-100	75-100	50-100	30-90	0-20	NP-4
	10-22	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	CL-ML, ML	A-4	0-2	0-8	89-100	75-100	50-100	30-90	0-20	NP-4
	22-30	Gravelly sand, gravelly loamy sand, very gravelly loamy coarse sand, sand	GP, SP-SM, SP, SM, GW	A-3, A-1, A-2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP
	30-48	Stratified coarse sand to very gravelly coarse sand	GP, GW, SM, SP, SP-SM	A-3, A-1, A-2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP
	48-121	Stratified sand to gravelly sand, stratified coarse sand to very gravelly coarse sand	GP, GW, SM, SP, SP-SM	A-3, A-1, A-2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
577D: Arcadian-----	0-2	Highly decomposed plant material	PT	A-8	0	0	0	0	0	0	---	---
	2-5	Very gravelly fine sandy loam	GC-GM, GM, SM	A-1, A-4, A- 2-4	0-5	10-20	30-75	10-65	5-65	5-45	16-31	1-10
	5-12	Very gravelly fine sandy loam, very gravelly loamy very fine sand	GC-GM, GM, SM	A-1, A-4, A- 2-4	0-5	10-20	30-75	10-65	5-65	5-45	20-40	1-12
	12-22	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
578D: Arcadian-----	0-2	Highly decomposed plant material	PT	A-8	0	0	0	0	0	0	---	---
	2-5	Very gravelly fine sandy loam	GC-GM, GM, SM	A-1, A-4, A- 2-4	0-5	10-20	30-75	10-65	5-65	5-45	16-31	1-10
	5-12	Very gravelly fine sandy loam, very gravelly loamy very fine sand	GC-GM, GM, SM	A-1, A-4, A- 2-4	0-5	10-20	30-75	10-65	5-65	5-45	20-40	1-12
	12-22	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
578D: Keweenaw-----	0-2	Highly decomposed plant material	PT	A-8	0	0	0	0	0	0	---	---
	2-4	Sandy loam, loamy sand	SM, SC-SM	A-2-4	0	0	95-100	95-100	50-75	15-30	0-66	NP-41
	4-6	Gravelly loamy fine sand, loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	50-80	15-45	0-21	NP-4
	6-25	Loamy fine sand, gravelly loamy fine sand	SM	A-2-4	0	0-7	80-100	75-100	70-80	15-45	0-21	NP-4
	25-45	Stratified sand to fine sand to loamy fine sand to loamy very fine sand	SM	A-2-4	0-5	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	45-56	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-5	0-7	80-100	75-100	60-95	15-50	0-21	NP-4
	56-71	Stratified loamy fine sand to fine sand to fine sandy loam	SM	A-2-4	0-3	0-5	80-100	75-100	70-95	15-30	0-21	NP-4
	71-90	Stratified loamy fine sand to fine sandy loam	ML, SM	A-2-4	0-3	0-5	80-100	75-100	60-80	15-50	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
625B: Fence-----	0-6	Very fine sandy loam	ML	A-4	0	0	100	95-100	85-100	70-90	0-20	NP-4
	6-7	Silt loam, very fine sandy loam, silt	CL-ML, ML	A-4	0	0	100	96-100	85-100	50-100	0-30	NP-7
	7-13	Silt loam, very fine sandy loam	CL-ML, ML	A-4	0	0	100	96-100	85-100	50-100	15-30	NP-7
	13-15	Silt loam, very fine sandy loam, silt	CL-ML, ML	A-4	0	0	100	96-100	85-100	50-100	15-30	NP-7
	15-20	Silt loam, very fine sandy loam, silt	CL-ML, ML	A-4	0	0	100	96-100	85-100	50-100	15-30	NP-7
	20-35	Silt loam, silt	CL-ML, ML	A-4	0	0	100	96-100	90-100	70-100	20-30	NP-9
	35-80	Stratified silt loam to silt	CL-ML, ML	A-4	0	0	100	96-100	90-100	70-100	20-30	NP-9
625C: Fence-----	0-6	Very fine sandy loam	ML	A-4	0	0	100	95-100	85-100	70-90	0-20	NP-4
	6-7	Silt loam, very fine sandy loam, silt	CL-ML, ML	A-4	0	0	100	96-100	85-100	50-100	0-30	NP-7
	7-13	Silt loam, very fine sandy loam	CL-ML, ML	A-4	0	0	100	96-100	85-100	50-100	15-30	NP-7
	13-15	Silt loam, very fine sandy loam, silt	CL-ML, ML	A-4	0	0	100	96-100	85-100	50-100	15-30	NP-7
	15-20	Silt loam, very fine sandy loam, silt	CL-ML, ML	A-4	0	0	100	96-100	85-100	50-100	15-30	NP-7
	20-35	Silt loam, silt	CL-ML, ML	A-4	0	0	100	96-100	90-100	70-100	20-30	NP-9
	35-80	Stratified silt loam to silt	CL-ML, ML	A-4	0	0	100	96-100	90-100	70-100	20-30	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
626D: Sporley-----	0-6	Very fine sandy loam	ML	A-4	0	0	100	95-100	85-100	70-90	0-20	NP-4
	6-7	Fine sandy loam, silt loam	ML	A-4	0	0-5	98-100	98-100	50-100	50-100	31-38	6-14
	7-12	Fine sandy loam, silt loam	ML	A-4	0	0-5	98-100	98-100	50-100	50-100	25-38	NP-13
	12-15	Very fine sandy loam, silt loam	ML	A-4	0	0-5	98-100	98-100	50-100	50-100	31-38	6-14
	15-24	Very fine sandy loam, silt loam	ML	A-4	0	0-5	98-100	98-100	50-100	50-100	25-38	NP-13
	24-30	Stratified silt loam to silty clay loam	ML, CL	A-6	0	0-5	98-100	98-100	60-100	60-100	38-55	15-35
	30-80	Stratified very fine sandy loam to silt loam to silt	ML, CL	A-4	0	0-5	98-100	98-100	50-100	40-100	25-38	NP-13
626E: Sporley-----	0-6	Very fine sandy loam	ML	A-4	0	0	100	95-100	85-100	70-90	0-20	NP-4
	6-7	Fine sandy loam, silt loam	ML	A-4	0	0-5	98-100	98-100	50-100	50-100	31-38	6-14
	7-12	Fine sandy loam, silt loam	ML	A-4	0	0-5	98-100	98-100	50-100	50-100	25-38	NP-13
	12-15	Silt loam, very fine sandy loam	ML	A-4	0	0-5	98-100	98-100	50-100	50-100	31-38	6-14
	15-24	Silt loam, very fine sandy loam	ML	A-4	0	0-5	98-100	98-100	50-100	50-100	25-38	NP-13
	24-30	Stratified silt loam to silty clay loam	ML, CL	A-6	0	0-5	98-100	98-100	60-100	60-100	38-55	15-35
	30-80	Stratified very fine sandy loam to silt loam to silt	ML, CL	A-4	0	0-5	98-100	98-100	50-100	40-100	25-38	NP-13

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
							4	10	40	200		
648B: Annalake-----	In				Pct	Pct					Pct	
	0-9	Sandy loam, very fine sandy loam	ML	A-4	0	0	89-100	85-100	70-100	25-80	0-41	NP-13
	9-16	Fine sandy loam	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	16-31	Stratified loamy very fine sand to silt loam to loamy fine sand	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	31-48	Stratified sand to fine sand to loamy fine sand to silt loam	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7
	48-61	Stratified sand to fine sand to loamy fine sand to silt loam	SC-SM, ML, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-30	NP-11
	61-80	Stratified fine sand to loamy fine sand to silt loam to silt	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
648C: Annalake-----	0-9	Sandy loam, very fine sandy loam	ML	A-4	0	0	89-100	85-100	70-100	25-80	0-41	NP-13
	9-16	Fine sandy loam	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	16-31	Stratified loamy very fine sand to silt loam to loamy fine sand	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	31-48	Stratified sand to fine sand to loamy fine sand to silt loam	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7
	48-61	Stratified sand to fine sand to loamy fine sand to silt loam	SC-SM, ML, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-30	NP-11
	61-80	Stratified fine sand to loamy fine sand to silt loam to silt	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7
650: Leafriver-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-14	Muck	PT	A-8	0	0	100	100	100	90-100	---	---
	14-16	Fine sand, sand, loamy coarse sand, coarse sand, loamy sand, loamy fine sand	SM	A-2-4	0	0	79-100	75-100	10-90	10-50	0-32	NP-13
	16-51	Stratified gravelly coarse sand to sand, sand, loamy sand	SM	A-2-4	0	0	79-100	75-100	0-75	0-40	0-27	NP-10

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
652B: Manido-----	0-3	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	3-9	Fine sand, sand	SM, SP-SM	A-2-4, A-3	0	0-1	95-100	95-100	60-95	5-40	0-21	NP-5
	9-11	Sand, fine sand	SM, SP-SM	A-2-4, A-3	0-1	0-1	95-100	95-100	60-95	5-40	0-21	NP-5
	11-17	Sand, fine sand	SM, SP-SM	A-2-4, A-3	0-1	0-1	95-100	95-100	60-95	5-40	0-21	NP-5
	17-37	Fine sand, sand	SM, SP-SM	A-2-4, A-3	0-1	0-1	95-100	95-100	60-95	1-40	0-21	NP-5
	37-60	Stratified loamy sand to loamy fine sand, stratified fine sand to sand to very fine sand	CL-ML, ML, SP-SM, SM	A-3, A-2-4	0-1	0-1	95-100	95-100	50-95	1-50	0-21	NP-5
	60-80	Stratified fine sand to sand to very fine sand	CL-ML, ML, SP-SM, SM	A-3, A-2-4	0-1	0-1	95-100	95-100	50-95	1-50	0-21	NP-5
Annalake-----	0-9	Sandy loam, very fine sandy loam	ML	A-4	0	0	89-100	85-100	70-100	25-80	0-41	NP-13
	9-16	Fine sandy loam	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	16-31	Stratified loamy very fine sand to silt loam to loamy fine sand	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	31-48	Stratified sand to fine sand to loamy fine sand to silt loam	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7
	48-61	Stratified sand to fine sand to loamy fine sand to silt loam	SC-SM, ML, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-30	NP-11
	61-80	Stratified fine sand to loamy fine sand to silt loam to silt	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
656B: Stutts-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-6	Loamy fine sand, sandy loam, fine sandy loam	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	6-8	Fine sandy loam, loamy fine sand, sandy loam	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	8-15	Fine sandy loam, sandy loam, loamy fine sand, fine sand	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-25	NP-4
	15-18	Fine sandy loam, loamy fine sand, fine sand, sandy loam	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-21	NP-4
	18-28	Sand, fine sand	SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	---	NP
	28-80	Fine sand, sand	SP-SM	A-3	0	0	92-100	85-100	70-95	8-30	---	NP
	Zandi-----	0-0.5	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---
0.5-4		Loamy fine sand, loamy very fine sand	SM, ML	A-2-4, A-4	0	0	95-100	90-100	55-100	10-65	0-25	NP-7
4-6		Loamy very fine sand, loamy fine sand	SM, ML	A-2-4, A-4	0	0	95-100	90-100	55-100	10-65	0-25	NP-7
6-34		Fine sandy loam, very fine sandy loam	SM, ML	A-4	0	0	95-100	90-100	60-100	20-70	0-28	NP-9
34-42		Stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam	ML, SM	A-2-4, A-4	0	0	100	100	50-100	30-80	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
656B: (Zandi)	In				Pct	Pct					Pct	
	42-57	Stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam	SM, ML	A-4, A-2-4	0	0	100	100	60-100	25-70	0-25	NP-7
	57-80	Stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam	SM, ML	A-2-4, A-4	0	0	100	100	60-100	25-70	0-25	NP-7
656C: Stutts-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-6	Fine sandy loam, loamy fine sand, sandy loam	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	6-8	Sandy loam, fine sandy loam, loamy fine sand	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	8-15	Fine sandy loam, sandy loam, loamy fine sand, fine sand	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-25	NP-4
	15-18	Fine sandy loam, sandy loam, loamy fine sand, fine sand	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-21	NP-4
	18-28	Fine sand, sand	SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	---	NP
	28-80	Fine sand, sand	SP-SM	A-3	0	0	92-100	85-100	70-95	8-30	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
656C: Zandi-----	0-0.5	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	NP
	0.5-4	Loamy fine sand, loamy very fine sand	SM, ML	A-2-4, A-4	0	0	95-100	90-100	55-100	10-65	0-25	NP-7
	4-6	Loamy fine sand, loamy very fine sand	SM, ML	A-2-4, A-4	0	0	95-100	90-100	55-100	10-65	0-25	NP-7
	6-34	Fine sandy loam, very fine sandy loam	SM, ML	A-4	0	0	95-100	90-100	60-100	20-70	0-28	NP-9
	34-42	Stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam	ML, SM	A-2-4, A-4	0	0	100	100	50-100	30-80	0-30	NP-11
	42-57	Stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam	SM, ML	A-4, A-2-4	0	0	100	100	60-100	25-70	0-25	NP-7
	57-80	Stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam	SM, ML	A-2-4, A-4	0	0	100	100	60-100	25-70	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
656D: Stutts-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-6	Fine sandy loam, loamy fine sand, sandy loam	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	6-8	Sandy loam, fine sandy loam, loamy fine sand	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	8-15	Fine sandy loam, sandy loam, loamy fine sand, fine sand	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-25	NP-4
	15-18	Fine sandy loam, sandy loam, loamy fine sand, fine sand	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-21	NP-4
	18-28	Fine sand, sand	SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	---	NP
	28-80	Fine sand, sand	SP-SM	A-3	0	0	92-100	85-100	70-95	8-30	---	NP
	Zandi-----	0-0.5	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---
0.5-4		Loamy very fine sand, loamy fine sand	SM, ML	A-2-4, A-4	0	0	95-100	90-100	55-100	10-65	0-25	NP-7
4-6		Loamy fine sand, loamy very fine sand	SM, ML	A-2-4, A-4	0	0	95-100	90-100	55-100	10-65	0-25	NP-7
6-34		Fine sandy loam, very fine sandy loam	SM, ML	A-4	0	0	95-100	90-100	60-100	20-70	0-28	NP-9
34-42		Stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam	ML, SM	A-2-4, A-4	0	0	100	100	50-100	30-80	0-30	NP-11

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
656D: (Zandi)	42-57	Stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam	SM, ML	A-4, A-2-4	0	0	100	100	60-100	25-70	0-25	NP-7
	57-80	Stratified very fine sand to loamy very fine sand to very fine sandy loam to silt loam	SM, ML	A-2-4, A-4	0	0	100	100	60-100	25-70	0-25	NP-7
680B: Tonkey-----	0-6	Mucky silt loam, mucky fine sandy loam	SM, ML	A-4	0	0	100	100	50-100	40-100	29-40	7-18
	6-9	Stratified loamy fine sand to fine sandy loam to silt loam	SM, ML	A-4	0	0	100	100	50-100	40-100	29-40	7-18
	9-18	Stratified sandy loam to fine sandy loam, silt loam	CL-ML, ML	A-4	0	0	100	100	50-100	30-90	17-27	NP-10
	18-28	Silt loam, stratified sandy loam to fine sandy loam	CL-ML, ML	A-4	0	0	100	100	50-100	30-90	17-27	NP-10
	28-37	Stratified loam to silt loam	SM, ML	A-4	0	0	100	100	10-90	10-85	17-27	NP-10
	37-67	Sandy loam	SM, ML	A-4	0	0	100	100	10-90	10-85	15-24	NP-10
	67-80	Stratified sandy loam to silt loam	SM, ML	A-4	0	0	100	100	10-90	10-85	15-24	NP-10

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
680B: Pleine-----	0-9	Very cobbly muck	PT	A-8	0-25	0-50	100	100	100	90-100	---	NP
	9-20	Very fine sandy loam, loam, sandy loam	SM, ML	A-4	0-25	0-25	72-100	45-100	42-99	23-57	0-25	NP-7
	20-33	Sandy loam, fine sandy loam, loam	SM, ML	A-4	0-25	0-25	76-100	52-100	44-95	21-51	0-25	NP-7
	33-80	Gravelly sandy loam, fine sandy loam	SM	A-4	0-25	0-25	54-100	14-100	11-70	5-36	0-25	NP-7
Annalake-----	0-9	Sandy loam, very fine sandy loam	ML	A-4	0	0	89-100	85-100	70-100	25-80	0-41	NP-13
	9-16	Fine sandy loam	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	16-31	Stratified loamy very fine sand to silt loam to loamy fine sand	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	31-48	Stratified sand to fine sand to loamy fine sand to silt loam	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7
	48-61	Stratified sand to fine sand to loamy fine sand to silt loam	SC-SM, ML, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-30	NP-11
	61-80	Stratified fine sand to loamy fine sand to silt loam to silt	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
681:												
Cathro-----	0-6	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	6-31	Muck	PT	A-8	0	0	100	90-100	90-100	40-100	---	NP
	31-80	Very fine sandy loam, loam, fine sandy loam, sandy loam, silt loam, silty clay loam	CL, SC-SM, SM, ML, CL-ML	A-6, A-4	0	0-10	85-100	65-100	50-85	30-55	16-39	1-18
Tonkey-----	0-6	Mucky fine sandy loam, mucky silt loam	SM, ML	A-4	0	0	100	100	50-100	40-100	29-40	7-18
	6-9	Stratified loamy fine sand to fine sandy loam to silt loam	SM, ML	A-4	0	0	100	100	50-100	40-100	29-40	7-18
	9-18	Silt loam, stratified sandy loam to fine sandy loam	CL-ML, ML	A-4	0	0	100	100	50-100	30-90	17-27	NP-10
	18-28	Silt loam, stratified sandy loam to fine sandy loam	CL-ML, ML	A-4	0	0	100	100	50-100	30-90	17-27	NP-10
	28-37	Stratified loam to silt loam	SM, ML	A-4	0	0	100	100	10-90	10-85	17-27	NP-10
	37-67	Sandy loam	SM, ML	A-4	0	0	100	100	10-90	10-85	15-24	NP-10
	67-80	Stratified sandy loam to silt loam	SM, ML	A-4	0	0	100	100	10-90	10-85	15-24	NP-10

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
683B: Amasa-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-4	Gravelly very fine sandy loam, cobbly silt loam, cobbly fine sandy loam	CL-ML	A-4	0-3	0-50	58-100	55-100	50-100	40-90	20-30	5-12
	4-7	Gravelly loam, gravelly very fine sandy loam, gravelly fine sandy loam, silt loam	CL-ML	A-4	0-3	0-50	58-100	55-100	50-100	40-90	20-30	5-12
	7-23	Gravelly loam, gravelly silt loam, gravelly fine sandy loam, very fine sandy loam	CL-ML	A-4	0-3	0-50	53-100	50-100	45-100	15-80	22-33	6-14
	23-28	Gravelly very fine sandy loam, gravelly loam, gravelly silt loam, fine sandy loam	SC-SM	A-4	0-3	0-50	58-100	55-100	30-90	10-70	22-33	6-14
	28-41	Gravelly coarse sand, sand	SP-SM, SP, SM, GM	A-2-4, A-1-b, A-1-a	0-8	0-50	27-100	25-100	0-90	0-40	12-21	NP-5
	41-80	Gravelly coarse sand, gravelly sand, very gravelly sand	GM, SP-SM	A-1-b, A-2-4, A-1-a	0-8	0-50	26-100	25-100	0-90	0-40	12-21	NP-5

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
							4	10	40	200		
	In				Pct	Pct					Pct	
683B: Oldman-----	0-1	Gravelly moderately decomposed plant material	PT	A-8	0-50	0-55	100	100	100	100	---	NP
	1-3	Very cobbly fine sandy loam, very cobbly loam, very cobbly silt loam, very gravelly loam, gravelly fine sandy loam, gravelly silt loam	ML, GM, GC- GM, CL-ML	A-4, A-1-a	0-50	0-55	50-95	30-90	20-75	10-60	0-26	NP-8
	3-23	Cobbly fine sandy loam, gravelly silt loam, extremely gravelly silt loam, very gravelly sandy loam, very cobbly sandy loam, extremely cobbly loam	CL-ML, GC-GM, GM, ML	A-4, A-1-a	0-50	0-55	50-95	30-90	20-75	10-60	0-26	NP-8
	23-28	Gravelly loam, extremely gravelly fine sandy loam, extremely cobbly loamy fine sand, very gravelly fine sandy loam, very cobbly fine sandy loam, cobbly loam	ML, SM, GM	A-1-a, A-4, A-2-4	0-50	0-55	50-90	30-85	20-75	10-60	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
683B: (Oldman)	28-43	Extremely bouldery loamy fine sand, extremely bouldery fine sandy loam, extremely stony fine sandy loam, extremely cobbly fine sandy loam, extremely stony loamy fine sand, very gravelly loam	ML, SM, GM	A-4, A-1-a, A-2-4	0-50	0-55	50-90	30-85	20-75	10-60	0-21	NP-4
	43-58	Very bouldery fine sandy loam, extremely bouldery loamy fine sand, very gravelly fine sandy loam, gravelly fine sandy loam, very cobbly loamy fine sand, very cobbly fine sandy loam	SM, ML, GM	A-4, A-1-a, A-2-4	0-50	0-55	50-90	30-85	20-75	10-60	0-21	NP-4
	58-80	Gravelly sand, very gravelly fine sandy loam, gravelly loamy fine sand, loam, fine sandy loam, very gravelly loamy fine sand	GM, ML, SM	A-1-a, A-4, A-2-4	0-50	0-55	50-90	30-85	20-75	10-60	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
683C: Amasa-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-4	Cobbly fine sandy loam, cobbly silt loam, gravelly very fine sandy loam	CL-ML	A-4	0-3	0-50	58-100	55-100	50-100	40-90	20-30	5-12
	4-7	Gravelly loam, gravelly very fine sandy loam, gravelly fine sandy loam, silt loam	CL-ML	A-4	0-3	0-50	58-100	55-100	50-100	40-90	20-30	5-12
	7-23	Gravelly fine sandy loam, very fine sandy loam, gravelly silt loam, gravelly loam	CL-ML	A-4	0-3	0-50	53-100	50-100	45-100	15-80	22-33	6-14
	23-28	Gravelly loam, gravelly silt loam, fine sandy loam, gravelly very fine sandy loam	SC-SM	A-4	0-3	0-50	58-100	55-100	30-90	10-70	22-33	6-14
	28-41	Sand, gravelly coarse sand	SP-SM, SP, SM, GM	A-2-4, A-1-b, A-1-a	0-8	0-50	27-100	25-100	0-90	0-40	12-21	NP-5
	41-80	Gravelly coarse sand, gravelly sand, very gravelly sand	GM, SP-SM	A-1-b, A-2-4, A-1-a	0-8	0-50	26-100	25-100	0-90	0-40	12-21	NP-5

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
683C: Oldman-----	0-1	Gravelly moderately decomposed plant material	PT	A-8	0-50	0-55	100	100	100	100	---	NP
	1-3	Very gravelly loam, very cobbly fine sandy loam, very cobbly silt loam, gravelly fine sandy loam, gravelly silt loam, very cobbly loam	ML, GM, GC- GM, CL-ML	A-4, A-1-a	0-50	0-55	50-95	30-90	20-75	10-60	0-26	NP-8
	3-23	Extremely gravelly silt loam, cobbly fine sandy loam, very gravelly sandy loam, extremely cobbly loam, very cobbly sandy loam, gravelly silt loam	CL-ML, GC-GM, GM, ML	A-4, A-1-a	0-50	0-55	50-95	30-90	20-75	10-60	0-26	NP-8
	23-28	Extremely gravelly fine sandy loam, very cobbly fine sandy loam, gravelly loam, very gravelly fine sandy loam, cobbly loam, extremely cobbly loamy fine sand	ML, SM, GM	A-1-a, A-4, A-2-4	0-50	0-55	50-90	30-85	20-75	10-60	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
683C: (Oldman)	28-43	Extremely bouldery fine sandy loam, extremely cobbly fine sandy loam, extremely stony loamy fine sand, extremely stony fine sandy loam, very gravelly loam, extremely bouldery loamy fine sand	ML, SM, GM	A-4, A-1-a, A-2-4	0-50	0-55	50-90	30-85	20-75	10-60	0-21	NP-4
	43-58	Very gravelly fine sandy loam, very cobbly fine sandy loam, gravelly fine sandy loam, very cobbly loamy fine sand, extremely bouldery loamy fine sand, very bouldery fine sandy loam	SM, ML, GM	A-4, A-1-a, A-2-4	0-50	0-55	50-90	30-85	20-75	10-60	0-21	NP-4
	58-80	Very gravelly fine sandy loam, loam, fine sandy loam, very gravelly loamy fine sand, gravelly loamy fine sand, gravelly sand	GM, ML, SM	A-1-a, A-4, A-2-4	0-50	0-55	50-90	30-85	20-75	10-60	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
683D: Amasa-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-4	Gravelly very fine sandy loam, cobbly silt loam, cobbly fine sandy loam			0-3	0-50	58-100	55-100	50-100	40-90	20-30	5-12
	4-7	Gravelly fine sandy loam, gravelly very fine sandy loam, gravelly loam, silt loam	CL-ML	A-4	0-3	0-50	58-100	55-100	50-100	40-90	20-30	5-12
	7-23	Gravelly silt loam, gravelly fine sandy loam, very fine sandy loam, gravelly loam	CL-ML	A-4	0-3	0-50	53-100	50-100	45-100	15-80	22-33	6-14
	23-28	Gravelly loam, gravelly silt loam, fine sandy loam, gravelly very fine sandy loam	SC-SM	A-4	0-3	0-50	58-100	55-100	30-90	10-70	22-33	6-14
	28-41	Sand, gravelly coarse sand	SP-SM, SP, SM, GM	A-2-4, A-1-b, A-1-a	0-8	0-50	27-100	25-100	0-90	0-40	12-21	NP-5
	41-80	Gravelly coarse sand, gravelly sand, very gravelly sand	GM, SP-SM	A-1-b, A-2-4, A-1-a	0-8	0-50	26-100	25-100	0-90	0-40	12-21	NP-5

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
683D: Oldman-----	0-1	Gravelly moderately decomposed plant material	PT	A-8	0-50	0-55	100	100	100	100	---	NP
	1-3	Very gravelly loam, gravelly fine sandy loam, gravelly silt loam, very cobbly loam, very cobbly silt loam, very cobbly fine sandy loam	ML, GM, GC- GM, CL-ML	A-4, A-1-a	0-50	0-55	50-95	30-90	20-75	10-60	0-26	NP-8
	3-23	Very gravelly sandy loam, extremely cobbly loam, extremely gravelly silt loam, cobbly fine sandy loam, gravelly silt loam, very cobbly sandy loam	CL-ML, GC-GM, GM, ML	A-4, A-1-a	0-50	0-55	50-95	30-90	20-75	10-60	0-26	NP-8
	23-28	Extremely cobbly loamy fine sand, cobbly loam, very gravelly fine sandy loam, gravelly loam, extremely gravelly fine sandy loam, very cobbly fine sandy loam	ML, SM, GM	A-1-a, A-4, A-2-4	0-50	0-55	50-90	30-85	20-75	10-60	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
683D: (Oldman)	28-43	Extremely cobbley fine sandy loam, very gravelly loam, extremely stony fine sandy loam, extremely stony loamy fine sand, extremely bouldery fine sandy loam, extremely bouldery loamy fine sand	ML, SM, GM	A-4, A-1-a, A-2-4	0-50	0-55	50-90	30-85	20-75	10-60	0-21	NP-4
	43-58	Very cobbly loamy fine sand, very gravelly fine sandy loam, extremely bouldery loamy fine sand, gravelly fine sandy loam, very cobbly fine sandy loam, very bouldery fine sandy loam	SM, ML, GM	A-4, A-1-a, A-2-4	0-50	0-55	50-90	30-85	20-75	10-60	0-21	NP-4
	58-80	Gravelly sand, very gravelly fine sandy loam, very gravelly loamy fine sand, fine sandy loam, gravelly loamy fine sand	GM, ML, SM	A-1-a, A-4, A-2-4	0-50	0-55	50-90	30-85	20-75	10-60	0-21	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
684B: Amasa-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-4	Fine sandy loam, cobbly fine sandy loam, gravelly silt loam, gravelly very fine sandy loam	CL-ML	A-4	0-3	0-50	58-100	55-100	30-90	10-70	22-33	6-14
	4-7	Silt loam, gravelly loam, gravelly very fine sandy loam, gravelly fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-3	0-50	80-100	55-100	40-90	20-80	0-30	NP-11
	7-23	Very fine sandy loam, gravelly loam, gravelly fine sandy loam, gravelly silt loam	CL-ML, ML, SC-SM, SM	A-4, A-2-4	0-3	0-50	80-100	55-100	40-90	20-70	0-25	NP-7
	23-28	Very fine sandy loam, gravelly silt loam, fine sandy loam, gravelly loam	CL-ML, ML, SC-SM, SM	A-2-4, A-4	0-3	0-50	80-100	55-100	40-90	20-70	0-25	NP-7
	28-41	Sand, gravelly coarse sand	SP-SM, SP, SM, GM	A-2-4, A-1-b, A-1-a	0-8	0-50	50-100	25-100	0-75	0-25	0-16	NP-1
	41-80	Very gravelly sand, gravelly sand, gravelly coarse sand	GM, SP-SM	A-1-b, A-2-4, A-1-a	0-8	0-50	50-100	25-100	0-75	0-25	0-16	NP-1

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
684C: Amasa-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-4	Gravelly very fine sandy loam, cobbly fine sandy loam, gravelly silt loam	CL-ML	A-4	0-3	0-50	58-100	55-100	30-90	10-70	22-33	6-14
	4-7	Gravelly fine sandy loam, gravelly loam, gravelly very fine sandy loam, silt loam	CL-ML	A-4	0-3	0-50	58-100	55-100	50-100	40-90	20-30	5-12
	7-23	Gravelly loam, gravelly silt loam, gravelly fine sandy loam, very fine sandy loam	CL-ML	A-4	0-3	0-50	53-100	50-100	45-100	15-80	22-33	6-14
	23-28	Fine sandy loam, gravelly very fine sandy loam, gravelly loam, gravelly silt loam	SC-SM	A-4	0-3	0-50	58-100	55-100	30-90	10-70	22-33	6-14
	28-41	Sand, gravelly coarse sand	SP-SM, SP, SM, GM	A-2-4, A-1-b, A-1-a	0-8	0-50	27-100	25-100	0-90	0-40	12-21	NP-5
	41-80	Gravelly sand, gravelly coarse sand, very gravelly sand	GM, SP-SM	A-1-b, A-2-4, A-1-a	0-8	0-50	26-100	25-100	0-90	0-40	12-21	NP-5

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
					4	10	40	200				
	In				Pct	Pct					Pct	
684D: Amasa-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-4	Cobbly fine sandy loam, gravelly silt loam, gravelly very fine sandy loam	CL-ML	A-4	0-3	0-50	58-100	55-100	30-90	10-70	22-33	6-14
	4-7	Gravelly loam, gravelly fine sandy loam, gravelly very fine sandy loam, silt loam	CL-ML	A-4	0-3	0-50	58-100	55-100	50-100	40-90	20-30	5-12
	7-23	Gravelly loam, gravelly silt loam, gravelly fine sandy loam, very fine sandy loam	CL-ML	A-4	0-3	0-50	53-100	50-100	45-100	15-80	22-33	6-14
	23-28	Gravelly very fine sandy loam, gravelly loam, gravelly silt loam, fine sandy loam	SC-SM	A-4	0-3	0-50	58-100	55-100	30-90	10-70	22-33	6-14
	28-41	Sand, gravelly coarse sand	SP-SM, SP, SM, GM	A-2-4, A-1-b, A-1-a	0-8	0-50	27-100	25-100	0-90	0-40	12-21	NP-5
	41-80	Gravelly coarse sand, gravelly sand, very gravelly sand	GM, SP-SM	A-1-b, A-2-4, A-1-a	0-8	0-50	26-100	25-100	0-90	0-40	12-21	NP-5

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
							4	10	40	200		
	In				Pct	Pct					Pct	
686B: Annalake-----	0-9	Very fine sandy loam, sandy loam	ML	A-4	0	0	89-100	85-100	70-100	25-80	0-41	NP-13
	9-16	Fine sandy loam	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	16-31	Stratified loamy very fine sand to silt loam to loamy fine sand	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	31-48	Stratified sand to fine sand to loamy fine sand to silt loam	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7
	48-61	Stratified sand to fine sand to loamy fine sand to silt loam	SC-SM, ML, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-30	NP-11
	61-80	Stratified fine sand to loamy fine sand to silt loam to silt	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
686B: Robago-----	0-6	Fine sandy loam, very fine sandy loam	SM, ML	A-4	0	0	75-100	75-100	60-100	20-100	15-25	NP-10
	6-9	Very fine sandy loam, fine sandy loam	SM, ML	A-4	0	0	75-100	75-100	60-100	20-80	15-25	NP-10
	9-15	Sandy loam, loam, fine sandy loam	ML, SM	A-4, A-2-4	0	0	75-100	75-100	40-100	10-80	17-27	NP-10
	15-22	Stratified silty clay loam to clay, stratified loamy sand to loamy fine sand to sandy loam to very fine sandy loam	ML, SM	A-4, A-2-4	0	0	75-100	75-100	40-90	10-70	17-27	NP-10
	22-39	Stratified sandy loam to fine sandy loam to very fine sandy loam to clay loam to silty clay loam	ML, SM	A-4, A-2-4	0	0	75-100	75-100	40-90	10-70	17-27	NP-10
	39-80	Stratified sandy loam to fine sandy loam to very fine sandy loam	ML, SM	A-4, A-2-4	0	0	75-100	75-100	40-100	10-80	15-25	NP-10
688: Cathro-----	0-6	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	6-31	Muck	PT	A-8	0	0	100	90-100	90-100	40-100	---	NP
	31-80	Very fine sandy loam, silt loam, silty clay loam, loam, fine sandy loam, sandy loam	CL, SC-SM, SM, ML, CL- ML	A-6, A-4	0	0-10	85-100	65-100	50-85	30-55	16-39	1-18

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
688: Leafriver-----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	90-100	---	---
	1-14	Muck	PT	A-8	0	0	100	100	100	90-100	---	---
	14-16	Loamy fine sand, loamy sand, loamy coarse sand, coarse sand, sand, fine sand	SM	A-2-4	0	0	79-100	75-100	10-90	10-50	0-32	NP-13
	16-51	Sand, loamy sand, stratified gravelly coarse sand to sand	SM	A-2-4	0	0	79-100	75-100	0-75	0-40	0-27	NP-10
689B: Chabeneau-----	0-1	Moderately decomposed plant material	PT	A-8	0-2	0-8	100	100	100	90-100	---	---
	1-2	Fine sandy loam, silt loam	ML, CL-ML	A-4	0-2	0-8	90-100	75-100	70-100	50-90	0-20	NP-4
	2-5	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	ML, CL-ML	A-4	0-2	0-8	90-100	75-100	70-100	50-90	0-20	NP-4
	5-10	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	CL-ML, ML	A-4	0-2	0-8	90-100	75-100	50-100	30-90	0-20	NP-4
	10-22	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	CL-ML, ML	A-4	0-2	0-8	89-100	75-100	50-100	30-90	0-20	NP-4

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
689B: (Chabeneau)	22-30	Gravelly sand, gravelly loamy sand, very gravelly loamy coarse sand, sand	GP, SP-SM, SP, SM, GW	A-3, A-1, A- 2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP
	30-48	Stratified coarse sand to very gravelly coarse sand	GP, GW, SM, SP, SP-SM	A-3, A-1, A- 2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP
	48-121	Stratified sand to gravelly sand, stratified coarse sand to very gravelly coarse sand	GP, GW, SM, SP, SP-SM	A-3, A-1, A- 2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP
Channing-----	0-2	Slightly decomposed plant material	PT	A-8	0-10	0-25	100	100	100	90-100	---	---
	2-6	Very fine sandy loam, fine sandy loam	ML	A-4	0-10	0-25	95-100	85-100	50-85	25-75	15-25	NP-6
	6-7	Very fine sandy loam, fine sandy loam	ML	A-4	0-10	0-25	95-100	85-100	50-85	25-75	15-25	NP-6
	7-16	Very fine sandy loam, fine sandy loam	ML	A-4	0-10	0-25	95-100	85-100	50-85	25-75	15-25	NP-7
	16-24	Fine sandy loam, very fine sandy loam, cobbly fine sandy loam	ML	A-4	0-10	0-25	95-100	85-100	50-85	25-75	15-25	NP-6
	24-29	Gravelly sand, very gravelly sand, stratified coarse sand to sand to loamy sand	SP, SP-SM, SM	A-3, A-1	0-5	0-10	65-85	35-75	20-52	0-15	0-14	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
689B: (Channing)	29-62	Gravelly sand, very gravelly sand, stratified coarse sand to sand to loamy sand	SM, SP, SP-SM	A-1, A-3	0-5	0-10	65-85	35-75	20-52	0-15	0-14	NP
Gogebic-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Cobbly very fine sandy loam, gravelly fine sandy loam, silt loam, sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, cobbly sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Gravelly fine sandy loam, cobbly loamy very fine sand, loamy sand, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
689B: (Gogebic)	In				Pct	Pct					Pct	
	33-49	Fine sandy loam, gravelly loamy fine sand, loamy fine sand, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	49-54	Cobbly sandy loam, gravelly loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Cobbly sandy loam, fine sandy loam, gravelly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sandy loam, cobbly sandy loam, gravelly fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
691B: Dishno-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-3	Cobbly fine sandy loam, cobbly very fine sandy loam, cobbly silt loam	ML, SM, CL-ML	A-4	0-25	0-25	95-100	85-98	50-90	45-65	0-28	NP-9
	3-9	Cobbly silt loam, fine sandy loam, cobbly very fine sandy loam	ML, SM, CL-ML	A-4	0-25	0-25	95-100	85-98	50-90	45-65	0-28	NP-9
	9-10	Silt loam, cobbly loam, cobbly fine sandy loam	ML, SM, CL- ML, SC-SM	A-4	0-25	0-25	95-100	85-98	50-90	45-65	0-28	NP-9
	10-18	Cobbly very fine sandy loam, cobbly fine sandy loam	SM, ML, SC- SM, CL-ML	A-4	0-25	0-25	95-100	85-98	45-90	30-60	0-28	NP-9
	18-22	Cobbly fine sandy loam, cobbly very fine sandy loam, cobbly loamy sand	SM, CL-ML, ML, SC-SM	A-4, A-2-4	0-25	0-25	95-100	85-98	45-90	10-50	0-28	NP-9
	22-29	Very stony loamy sand, very cobbly loamy sand, cobbly loamy sand	SM	A-2-4	0-25	0-25	85-100	65-85	25-70	10-30	0-25	NP-7
	29-46	Very cobbly loamy sand, cobbly loamy sand, very stony loamy sand	SM	A-2-4	0-25	0-25	85-100	65-85	25-70	10-30	0-25	NP-7
	46-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
691B: Tula-----	0-1	Highly decomposed plant material	PT	A-8	0-7	0-30	100	100	100	100	---	NP
	1-5	Fine sandy loam, cobbly very fine sandy loam	CL-ML, ML, SM	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	5-8	Fine sandy loam, cobbly very fine sandy loam	CL-ML, SM, ML	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	8-20	Fine sandy loam, cobbly very fine sandy loam	CL-ML, SM, ML	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	20-28	Fine sandy loam, gravelly sandy loam	ML, CL-ML, SM	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	28-37	Gravelly loam, fine sandy loam, loamy sand, gravelly sandy loam	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-28	NP-9
	37-62	Gravelly loamy sand, gravelly loam, gravelly sandy loam, fine sandy loam	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-30	NP-11
	62-80	Gravelly sandy loam, fine sandy loam	ML, SC-SM, SM	A-4	0-7	1-23	85-100	65-92	40-80	20-55	0-28	NP-9
Rock outcrop.												

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
691D: Dishno-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-3	Cobbly very fine sandy loam, cobbly silt loam, cobbly fine sandy loam	ML, SM, CL-ML	A-4	0-25	0-25	95-100	85-98	50-90	45-65	0-28	NP-9
	3-9	Cobbly silt loam, cobbly very fine sandy loam, fine sandy loam	ML, SM, CL-ML	A-4	0-25	0-25	95-100	85-98	50-90	45-65	0-28	NP-9
	9-10	Silt loam, cobbly fine sandy loam, cobbly loam	ML, SM, CL- ML, SC-SM	A-4	0-25	0-25	95-100	85-98	50-90	45-65	0-28	NP-9
	10-18	Cobbly very fine sandy loam, cobbly fine sandy loam	SM, ML, SC- SM, CL-ML	A-4	0-25	0-25	95-100	85-98	45-90	30-60	0-28	NP-9
	18-22	Cobbly very fine sandy loam, cobbly fine sandy loam, cobbly loamy sand	SM, CL-ML, ML, SC-SM	A-4, A-2-4	0-25	0-25	95-100	85-98	45-90	10-50	0-28	NP-9
	22-29	Very stony loamy sand, cobbly loamy sand, very cobbly loamy sand	SM	A-2-4	0-25	0-25	85-100	65-85	25-70	10-30	0-25	NP-7
	29-46	Very cobbly loamy sand, cobbly loamy sand, very stony loamy sand	SM	A-2-4	0-25	0-25	85-100	65-85	25-70	10-30	0-25	NP-7
	46-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
691D: Tula-----	0-1	Highly decomposed plant material	PT	A-8	0-7	0-30	100	100	100	100	---	NP
	1-5	Cobbly very fine sandy loam, fine sandy loam	CL-ML, ML, SM	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	5-8	Cobbly very fine sandy loam, fine sandy loam	CL-ML, SM, ML	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	8-20	Cobbly very fine sandy loam, fine sandy loam	CL-ML, SM, ML	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	20-28	Gravelly sandy loam, fine sandy loam	ML, CL-ML, SM	A-4	0-7	1-30	95-100	75-85	50-80	30-55	0-28	NP-9
	28-37	Loamy sand, gravelly sandy loam, fine sandy loam, gravelly loam	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-28	NP-9
	37-62	Fine sandy loam, gravelly sandy loam, gravelly loam, gravelly loamy sand	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-30	NP-11
	62-80	Fine sandy loam, gravelly sandy loam	ML, SC-SM, SM	A-4	0-7	1-23	85-100	65-92	40-80	20-55	0-28	NP-9
Rock outcrop.												

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
693B: Chabeneau-----	0-1	Moderately decomposed plant material	PT	A-8	0-2	0-8	100	100	100	90-100	---	---
	1-2	Fine sandy loam, silt loam	ML, CL-ML	A-4	0-2	0-8	90-100	75-100	70-100	50-90	0-20	NP-4
	2-5	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	ML, CL-ML	A-4	0-2	0-8	90-100	75-100	70-100	50-90	0-20	NP-4
	5-10	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	CL-ML, ML	A-4	0-2	0-8	90-100	75-100	50-100	30-90	0-20	NP-4
	10-22	Silt loam, fine sandy loam, gravelly silt loam, cobbly fine sandy loam	CL-ML, ML	A-4	0-2	0-8	89-100	75-100	50-100	30-90	0-20	NP-4
	22-30	Gravelly sand, gravelly loamy sand, very gravelly loamy coarse sand, sand	GP, SP-SM, SP, SM, GW	A-3, A-1, A- 2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP
	30-48	Stratified coarse sand to very gravelly coarse sand	GP, GW, SM, SP, SP-SM	A-3, A-1, A- 2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP
	48-121	Stratified sand to gravelly sand, stratified coarse sand to very gravelly coarse sand	GP, GW, SM, SP, SP-SM	A-3, A-1, A- 2-4	0-2	0-15	40-85	35-80	10-65	0-15	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
693B: Annalake-----	0-9	Very fine sandy loam, sandy loam	ML	A-4	0	0	89-100	85-100	70-100	25-80	0-41	NP-13
	9-16	Fine sandy loam	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	16-31	Stratified loamy very fine sand to silt loam to loamy fine sand	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	31-48	Stratified sand to fine sand to loamy fine sand to silt loam	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7
	48-61	Stratified sand to fine sand to loamy fine sand to silt loam	SC-SM, ML, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-30	NP-11
	61-80	Stratified fine sand to loamy fine sand to silt loam to silt	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
							4	10	40	200		
	In				Pct	Pct					Pct	
694D: Annalake-----	0-9	Very fine sandy loam, sandy loam	ML	A-4	0	0	89-100	85-100	70-100	25-80	0-41	NP-13
	9-16	Fine sandy loam	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	16-31	Stratified loamy very fine sand to silt loam to loamy fine sand	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-21	NP-4
	31-48	Stratified sand to fine sand to loamy fine sand to silt loam	ML, CL-ML, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7
	48-61	Stratified sand to fine sand to loamy fine sand to silt loam	SC-SM, ML, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-30	NP-11
	61-80	Stratified fine sand to loamy fine sand to silt loam to silt	ML, SC-SM, CL-ML, SM	A-2-4, A-4	0	0	95-100	85-100	70-99	25-80	0-25	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
694D: Stutts-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	NP
	1-6	Fine sandy loam, loamy fine sand, sandy loam	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	6-8	Sandy loam, fine sandy loam, loamy fine sand	SM, SC-SM	A-2-4	0	0	92-100	84-100	70-95	8-30	0-25	NP-7
	8-15	Fine sandy loam, sandy loam, fine sand, loamy fine sand	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-25	NP-4
	15-18	Fine sand, loamy fine sand, sandy loam, fine sandy loam	SM, SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	0-21	NP-4
	18-28	Fine sand, sand	SP-SM	A-2-4, A-3	0	0	92-100	84-100	70-95	8-30	---	NP
	28-80	Fine sand, sand	SP-SM	A-3	0	0	92-100	85-100	70-95	8-30	---	NP
Arnheim-----	0-5	Mucky silt loam, very fine sandy loam, loamy very fine sand	SM, CL-ML, ML	A-4	0	0	100	100	90-100	40-90	15-25	NP-6
	5-10	Silt loam, loamy very fine sand, very fine sandy loam	CL-ML, ML, SM	A-4	0	0	100	100	50-100	5-90	15-30	NP-10
	10-80	Stratified very fine sandy loam to silt loam to loamy fine sand to fine sandy loam	CL-ML, ML, SM	A-4	0	0	97-100	97-100	50-100	30-100	0-38	NP-13

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
5170: Minocqua-----	0-4	Muck	PT	A-8	0	0	100	100	100	100	---	NP
	4-15	Silt loam, loam, sandy loam, fine sandy loam, very fine sandy loam	CL, ML, SC, SM	A-2, A-4	0	0-7	80-100	75-100	45-100	25-90	0-35	NP-13
	15-28	Loam, gravelly sandy loam, fine sandy loam	CL, ML, SC, SM	A-2, A-4, A-1	0	0-7	55-100	50-100	30-95	15-80	0-28	NP-9
	28-60	Stratified sand to very gravelly coarse sand	GP, GP-GM, SP, SP-SM	A-1, A-2, A-3	0	0-7	45-100	40-95	15-65	0-15	0-14	NP
Pleine-----	0-9	Very cobbly muck	PT	A-8	0-25	0-50	100	100	100	90-100	---	NP
	9-20	Very fine sandy loam, loam, sandy loam, fine sandy loam	SM, ML, CL- ML, SC-SM	A-4	0-25	6-25	90-100	78-100	50-95	30-60	16-25	1-7
	20-33	Sandy loam, fine sandy loam, loam	CL-ML, ML, SC-SM, SM	A-4	0-25	6-25	90-100	78-100	50-95	30-60	16-25	1-7
	33-80	Fine sandy loam, gravelly sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-25	6-25	70-95	50-78	30-70	10-50	16-25	1-7
Cathro-----	0-6	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	6-31	Muck	PT	A-8	0	0	100	90-100	90-100	40-100	---	NP
	31-80	Sandy loam, loam, fine sandy loam, very fine sandy loam, silty clay loam, silt loam	CL, SC-SM, SM, ML, CL- ML	A-6, A-4	0	0-10	85-100	65-100	50-85	30-55	16-39	1-18

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
5171B: Tula-----	0-1	Highly decomposed plant material	PT	A-8	0	0	100	100	100	100	---	---
	1-5	Fine sandy loam	ML, SM, CL-ML	A-4	0-7	2-30	80-95	75-85	50-75	30-50	0-29	NP-6
	5-8	Fine sandy loam, very fine sandy loam, cobbly fine sandy loam, cobbly very fine sandy loam	SC-SM, ML, SM, CL-ML	A-4	0-7	2-30	80-95	75-85	50-75	30-50	0-22	NP-4
	8-20	Cobbly very fine sandy loam, cobbly fine sandy loam, very fine sandy loam, fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-7	2-30	80-95	75-85	50-85	30-55	0-26	NP-7
	20-28	Gravelly sandy loam, sandy loam, fine sandy loam, gravelly fine sandy loam	SC-SM, SM, CL-ML, ML	A-2-4, A-4	0-7	2-30	80-95	75-85	40-75	20-50	0-26	NP-7
	28-37	Gravelly sandy loam, gravelly loamy sand	SC-SM, SM	A-2-4	0-7	2-25	65-95	65-90	30-70	15-35	0-23	NP-6
	37-62	Gravelly loamy sand, gravelly loam, gravelly sandy loam, fine sandy loam	ML, SM, CL-ML	A-2-4, A-4	0-7	1-23	85-100	70-92	50-80	20-55	0-30	NP-11
	62-80	Gravelly sandy loam, cobbly sandy loam, fine sandy loam	SC, SC-SM, SM, CL-ML, ML	A-4, A-2-4	0-7	2-25	65-95	65-90	35-75	15-50	16-26	2-8

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
5171B: Wormet-----	0-1	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	---	---
	1-2	Sandy loam	SM	A-2-4, A-4	0	0-15	80-100	77-100	50-85	20-55	20-41	2-13
	2-6	Sandy loam, gravelly fine sandy loam, loam	SM, SC-SM	A-2-4, A-4	0	0-15	55-100	50-100	30-95	15-75	17-39	2-17
	6-8	Sandy loam, gravelly fine sandy loam, loam	SC, SM, SC-SM	A-2-4, A-4	0	0-15	55-100	50-100	30-95	15-75	20-41	2-17
	8-19	Sandy loam, gravelly fine sandy loam, loam	SC, SM, SC-SM	A-2-4, A-4	0	0-15	55-100	50-100	30-95	15-75	18-39	2-17
	19-60	Stratified sand to very gravelly coarse sand	GP, SP, SP-SM	A-1, A-2, A-3	0	0-15	40-100	25-95	15-70	0-15	0-14	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
5171B: Gogebic, sandy substratum-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Fine sandy loam, gravelly silt loam, sandy loam, cobbly very fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Gravelly fine sandy loam, silt loam, cobbly very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Silt loam, gravelly fine sandy loam, sandy loam, cobbly very fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, cobbly sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Gravelly fine sandy loam, cobbly loamy very fine sand, loamy sand, sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Gravelly loamy fine sand, cobbly sandy loam, fine sandy loam, loamy fine sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
5171B: (Gogebic)	49-54	Gravelly loam, cobble sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Gravelly sandy loam, cobble sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sand, gravelly sand	SP-SM, SP	A-2-4, A-3	0-15	0-30	85-100	55-95	35-70	0-40	---	NP
5172B: Gogebic, sandy substratum-----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Sandy loam, cobble very fine sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Sandy loam, cobble very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Gravelly fine sandy loam, silt loam, cobble very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, cobble sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
5172B: (Gogebic)	In				Pct	Pct					Pct	
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Cobbly sandy loam, loamy fine sand, gravelly loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	49-54	Gravelly loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Fine sandy loam, cobbly sandy loam, gravelly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Gravelly sand, sand	SP-SM, SP	A-2-4, A-3	0-15	0-30	85-100	55-95	35-70	0-40	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
5172B: Pence-----	0-2	Moderately decomposed plant material	PT	A-8	0-5	0-15	100	100	100	100	---	NP
	2-6	Fine sandy loam, sandy loam, gravelly loamy sand	SM, ML, CL- ML, SC-SM	A-4, A-2-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	6-9	Gravelly sandy loam, fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	9-13	Gravelly fine sandy loam, fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	13-16	Coarse sand, gravelly coarse sand, loamy sand, loamy coarse sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	16-31	Sand, coarse sand, gravelly coarse sand, gravelly loamy sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	31-80	Stratified gravelly coarse sand to sand	SP, SP-SM	A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-20	---	NP
	Cathro-----	0-6	Muck	PT	A-8	0	0	100	100	100	90-100	---
6-31		Muck	PT	A-8	0	0	100	90-100	90-100	40-100	---	NP
31-80		Sandy loam, silt loam, loam, fine sandy loam, very fine sandy loam, silty clay loam	CL, SC-SM, SM, ML, CL- ML	A-6, A-4	0	0-10	85-100	65-100	50-85	30-55	16-39	1-18

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
5172C: Gogebic, sandy substratum-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Sandy loam, cobbly very fine sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Sandy loam, cobbly very fine sandy loam, gravelly fine sandy loam, silt loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, cobbly sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Cobbly sandy loam, loamy fine sand, gravelly loamy fine sand, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
5172C: (Gogebic)	49-54	Gravelly loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Fine sandy loam, cobbly sandy loam, gravelly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sand, gravelly sand	SP, SP-SM	A-2-4, A-3	0-15	0-30	85-100	55-95	35-70	0-40	---	NP
Pence-----	0-2	Moderately decomposed plant material	PT	A-8	0-5	0-15	100	100	100	100	---	NP
	2-6	Fine sandy loam, gravelly loamy sand, sandy loam	SM, ML, CL- ML, SC-SM	A-4, A-2-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	6-9	Gravelly sandy loam, fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	9-13	Gravelly fine sandy loam, fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	13-16	Loamy sand, loamy coarse sand, coarse sand, gravelly coarse sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	16-31	Gravelly coarse sand, gravelly loamy sand, coarse sand, sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	31-80	Stratified gravelly coarse sand to sand	SP, SP-SM	A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-20	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
	In				Pct	Pct					Pct	
5172C: Cathro-----	0-6	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	6-31	Muck	PT	A-8	0	0	100	90-100	90-100	40-100	---	NP
	31-80	Fine sandy loam, very fine sandy loam, sandy loam, loam, silty clay loam, silt loam	CL, SC-SM, SM, ML, CL- ML	A-6, A-4	0	0-10	85-100	65-100	50-85	30-55	16-39	1-18
5172D: Gogebic, sandy substratum----	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Sandy loam, cobble very fine sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Gravelly fine sandy loam, sandy loam, silt loam, cobble very fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Silt loam, gravelly fine sandy loam, cobble very fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Very fine sandy loam, cobble sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10						
					inches	inches	4	10	40	200		
5172D: (Gogebic)	In				Pct	Pct					Pct	
	20-33	Gravelly fine sandy loam, loamy sand, sandy loam, cobbly loamy very fine sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	33-49	Fine sandy loam, gravelly loamy fine sand, loamy fine sand, cobbly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	49-54	Fine sandy loam, cobbly sandy loam, gravelly loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Fine sandy loam, cobbly sandy loam, gravelly sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sand, gravelly sand	SP, SP-SM	A-2-4, A-3	0-15	0-30	85-100	55-95	35-70	0-40	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
5172D: Pence-----	0-2	Moderately decomposed plant material	PT	A-8	0-5	0-15	100	100	100	100	---	NP
	2-6	Fine sandy loam, gravelly loamy sand, sandy loam	SM, ML, CL- ML, SC-SM	A-4, A-2-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	6-9	Gravelly sandy loam, fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	9-13	Gravelly fine sandy loam, fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	13-16	Coarse sand, gravelly coarse sand, loamy sand, loamy coarse sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	16-31	Gravelly coarse sand, gravelly loamy sand, coarse sand, sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	31-80	Stratified gravelly coarse sand to sand	SP, SP-SM	A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-20	---	NP
Cathro-----	0-6	Muck	PT	A-8	0	0	100	100	100	90-100	---	NP
	6-31	Muck	PT	A-8	0	0	100	90-100	90-100	40-100	---	NP
	31-80	Silt loam, silty clay loam, very fine sandy loam, sandy loam, fine sandy loam, loam	CL, SC-SM, SM, ML, CL- ML	A-6, A-4	0	0-10	85-100	65-100	50-85	30-55	16-39	1-18

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
5173D: Gogebic, sandy substratum-----	In				Pct	Pct					Pct	
	0-1	Slightly decomposed plant material	PT	A-8	0	0-25	100	100	100	100	---	NP
	1-5	Sandy loam, cobbly very fine sandy loam, gravelly silt loam, fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	5-8	Cobbly very fine sandy loam, silt loam, gravelly fine sandy loam, sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	8-12	Silt loam, cobbly very fine sandy loam, sandy loam, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	12-20	Fine sandy loam, gravelly silt loam, cobbly sandy loam, very fine sandy loam	SM, ML	A-2-4, A-4	0-15	0-25	90-100	80-100	40-95	30-80	0-28	NP-9
	20-33	Loamy sand, sandy loam, cobbly loamy very fine sand, gravelly fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
5173D: (Gogebic)	33-49	Gravelly loamy fine sand, fine sandy loam, cobbly sandy loam, loamy fine sand	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	49-54	Fine sandy loam, cobbly sandy loam, gravelly loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	54-68	Gravelly sandy loam, cobbly sandy loam, fine sandy loam	ML, SM	A-2-4, A-4	0-15	0-30	85-100	70-95	40-80	20-70	0-28	NP-9
	68-80	Sand, gravelly sand	SP, SP-SM	A-2-4, A-3	0-15	0-30	85-100	55-95	35-70	0-40	---	NP

Table 16.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
5173D: Pence-----	0-2	Moderately decomposed plant material	PT	A-8	0-5	0-15	100	100	100	100	---	NP
	2-6	Fine sandy loam, gravelly loamy sand, sandy loam	SM, ML, CL- ML, SC-SM	A-4, A-2-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	6-9	Gravelly sandy loam, fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	9-13	Fine sandy loam, gravelly fine sandy loam	SM, CL-ML, ML, SC-SM	A-2-4, A-4	0-5	0-15	75-100	50-100	30-90	15-65	0-28	NP-9
	13-16	Coarse sand, gravelly coarse sand, loamy sand, loamy coarse sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	16-31	Gravelly coarse sand, gravelly loamy sand, coarse sand, sand	SP, SM, SP-SM	A-2-4, A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-25	0-21	NP-4
	31-80	Stratified gravelly coarse sand to sand	SP, SP-SM	A-1-b, A-3	0-5	0-15	75-100	50-100	5-65	1-20	---	NP

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils

(Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer)

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
7:											
Histosols-----	0-51	---	0.20-0.30	0.20-0.60	0.35-0.45	---	---	---	5	8	0
	51-80	---	---	0.00-20.00	---	---	---	---			
Aquents-----	0-80	---	---	---	---	---	---	---	-	8	0
10:											
Witbeck-----	0-6	---	0.20-0.30	0.57-2.00	0.35-0.45	---	---	---	5	5	56
	6-10	0-27	1.10-1.35	0.60-2.00	0.12-0.13	0.0-3.0	.10	.37			
	10-22	0-20	1.50-1.85	0.60-2.00	0.13-0.14	0.0-3.0	.15	.24			
	22-30	0-27	1.70-1.80	0.60-2.00	0.14-0.16	0.0-3.0	.28	.43			
	30-39	0-27	1.70-1.80	0.60-2.00	0.14-0.16	0.0-3.0	.28	.43			
	39-60	0-27	1.70-1.80	0.60-2.00	0.11-0.12	0.0-3.0	.15	.28			
12A:											
Monico-----	0-2	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	5	3	86
	2-4	7-27	1.20-1.50	0.60-2.00	0.20-0.22	0.0-3.0	.32	.32			
	4-7	0-27	1.20-1.50	0.60-2.00	0.20-0.22	0.0-3.0	.32	.32			
	7-15	0-27	1.35-1.60	2.00-6.00	0.13-0.15	0.0-3.0	.24	.28			
	15-28	0-27	1.35-1.60	2.00-6.00	0.12-0.14	0.0-3.0	.24	.28			
	28-38	0-27	1.35-1.60	2.00-6.00	0.12-0.14	0.0-3.0	.24	.28			
	38-47	0-20	1.35-1.60	2.00-6.00	0.11-0.13	0.0-3.0	.24	.28			
	47-65	0-20	1.60-1.80	2.00-6.00	0.11-0.13	0.0-3.0	.24	.28			
13B:											
Argonne-----	0-2	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	4	3	86
	2-5	0-20	1.30-1.60	0.60-2.00	0.16-0.18	0.0-3.0	.24	.24			
	5-9	0-20	1.35-1.70	2.00-6.00	0.13-0.15	0.0-3.0	.24	.24			
	9-15	0-20	1.35-1.70	2.00-6.00	0.12-0.14	0.0-3.0	.24	.24			
	15-29	0-20	1.35-1.70	2.00-6.00	0.11-0.13	0.0-3.0	.24	.24			
	29-39	0-20	1.35-1.70	2.00-6.00	0.11-0.12	0.0-3.0	.24	.28			
	39-54	0-20	1.35-1.70	0.00-0.06	0.10-0.11	0.0-3.0	.20	.28			
	54-82	0-20	1.60-1.80	2.00-6.00	0.09-0.10	0.0-3.0	.15	.24			
13C:											
Argonne-----	0-2	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	4	3	86
	2-5	0-20	1.30-1.60	0.60-2.00	0.16-0.18	0.0-3.0	.24	.24			
	5-9	0-20	1.35-1.70	2.00-6.00	0.13-0.15	0.0-3.0	.24	.24			
	9-15	0-20	1.35-1.70	2.00-6.00	0.12-0.14	0.0-3.0	.24	.24			
	15-29	0-20	1.35-1.70	2.00-6.00	0.11-0.13	0.0-3.0	.24	.24			
	29-39	0-20	1.35-1.70	2.00-6.00	0.11-0.12	0.0-3.0	.24	.28			
	39-54	0-20	1.35-1.70	0.00-0.06	0.10-0.11	0.0-3.0	.20	.28			
	54-82	0-20	1.60-1.80	2.00-6.00	0.09-0.10	0.0-3.0	.15	.24			
13D:											
Argonne-----	0-2	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	4	3	86
	2-5	0-20	1.30-1.60	0.60-2.00	0.16-0.18	0.0-3.0	.24	.24			
	5-9	0-20	1.35-1.70	2.00-6.00	0.13-0.15	0.0-3.0	.24	.24			
	9-15	0-20	1.35-1.70	2.00-6.00	0.12-0.14	0.0-3.0	.24	.24			
	15-29	0-20	1.35-1.70	2.00-6.00	0.11-0.13	0.0-3.0	.24	.24			
	29-39	0-20	1.35-1.70	2.00-6.00	0.11-0.12	0.0-3.0	.24	.28			
	39-54	0-20	1.35-1.70	0.00-0.06	0.10-0.11	0.0-3.0	.20	.28			
	54-82	0-20	1.60-1.80	2.00-6.00	0.09-0.10	0.0-3.0	.15	.24			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility	Wind erodi- bility
							K	Kf	T	group	index
	In	Pct	g/cc	In/hr	In/in	Pct					
15B:											
Wabeno-----	0-2	0-27	1.30-1.60	0.60-2.00	0.21-0.23	0.0-3.0	.32	.37	4	5	56
	2-4	0-27	1.30-1.60	0.60-2.00	0.21-0.23	0.0-3.0	.37	.43			
	4-11	0-27	1.35-1.70	0.60-2.00	0.21-0.23	0.0-3.0	.37	.43			
	11-23	0-27	1.35-1.70	0.60-2.00	0.19-0.21	0.0-3.0	.37	.43			
	23-32	0-27	1.35-1.70	0.60-2.00	0.19-0.21	0.0-3.0	.37	.43			
	32-42	0-20	1.80-2.10	0.00-0.06	0.04-0.05	0.0-3.0	.32	.43			
	42-50	0-20	1.80-2.10	0.00-0.06	0.03-0.03	0.0-3.0	.24	.28			
	50-60	0-20	1.60-1.80	2.00-6.00	0.10-0.12	0.0-3.0	.24	.28			
15C:											
Wabeno-----	0-2	0-27	1.30-1.60	0.60-2.00	0.21-0.23	0.0-3.0	.32	.37	4	5	56
	2-4	0-27	1.30-1.60	0.60-2.00	0.21-0.23	0.0-3.0	.37	.43			
	4-11	0-27	1.35-1.70	0.60-2.00	0.21-0.23	0.0-3.0	.37	.43			
	11-23	0-27	1.35-1.70	0.60-2.00	0.19-0.21	0.0-3.0	.37	.43			
	23-32	0-27	1.35-1.70	0.60-2.00	0.19-0.21	0.0-3.0	.37	.43			
	32-42	0-20	1.80-2.10	0.00-0.06	0.04-0.05	0.0-3.0	.32	.43			
	42-50	0-20	1.80-2.10	0.00-0.06	0.03-0.03	0.0-3.0	.24	.28			
	50-60	0-20	1.60-1.80	2.00-6.00	0.10-0.12	0.0-3.0	.24	.28			
16A:											
Fence-----	0-6	8-20	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37	5	5	56
	6-7	5-20	1.35-1.55	0.60-2.00	0.18-0.22	0.0-2.9	.37	.37			
	7-13	5-20	1.50-1.65	0.60-2.00	0.16-0.22	0.0-2.9	.43	.43			
	13-15	5-20	1.50-1.65	0.60-2.00	0.16-0.22	0.0-2.9	.43	.43			
	15-20	6-20	1.50-1.65	0.60-2.00	0.16-0.22	0.0-2.9	.43	.43			
	20-35	8-20	1.50-1.65	0.60-2.00	0.18-0.22	0.0-2.9	.43	.43			
	35-80	5-20	1.50-1.65	0.20-0.60	0.18-0.22	0.0-2.9	.43	.43			
17B:											
Lode-----	0-7	0-27	1.30-1.60	0.60-2.00	0.22-0.24	0.0-3.0	.37	.37	4	5	56
	7-18	0-27	1.35-1.70	0.60-2.00	0.22-0.24	0.0-3.0	.37	.37			
	18-24	0-27	1.35-1.70	0.60-2.00	0.17-0.19	0.0-3.0	.37	.37			
	24-31	0-20	1.35-1.70	0.60-2.00	0.11-0.13	0.0-3.0	.20	.24			
	31-37	0-10	1.35-1.70	20.00-59.98	0.02-0.04	0.0-3.0	.15	.15			
	37-59	0-10	1.55-1.65	6.00-20.00	0.05-0.07	0.0-3.0	.15	.15			
	59-80	0-10	1.55-1.65	6.00-20.00	0.05-0.07	0.0-3.0	.15	.15			
17C:											
Lode-----	0-7	0-27	1.30-1.60	0.60-2.00	0.22-0.24	0.0-3.0	.37	.37	4	5	56
	7-18	0-27	1.35-1.70	0.60-2.00	0.22-0.24	0.0-3.0	.37	.37			
	18-24	0-27	1.35-1.70	0.60-2.00	0.17-0.19	0.0-3.0	.37	.37			
	24-31	0-20	1.35-1.70	0.60-2.00	0.11-0.13	0.0-3.0	.20	.24			
	31-37	0-10	1.35-1.70	20.00-59.98	0.02-0.04	0.0-3.0	.15	.15			
	37-59	0-10	1.55-1.65	6.00-20.00	0.05-0.07	0.0-3.0	.15	.15			
	59-80	0-10	1.55-1.65	6.00-20.00	0.05-0.07	0.0-3.0	.15	.15			
20B:											
Pence-----	0-2	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	3	3	86
	2-6	1-18	1.35-1.65	2.00-6.00	0.13-0.15	0.0-3.0	.24	.24			
	6-9	2-18	1.35-1.65	2.00-6.00	0.12-0.14	0.0-3.0	.20	.24			
	9-13	2-18	1.35-1.65	2.00-6.00	0.14-0.16	0.0-3.0	.20	.24			
	13-16	0-10	1.35-1.65	6.00-20.00	0.08-0.10	0.0-1.0	.15	.15			
	16-31	0-10	1.55-1.75	6.00-20.00	0.02-0.04	---	.15	.15			
	31-80	0-5	1.55-1.75	20.00-41.52	0.02-0.05	---	.05	.10			
Lode-----	0-7	0-27	1.30-1.60	0.60-2.00	0.22-0.24	0.0-3.0	.37	.37	4	5	56
	7-18	0-27	1.35-1.70	0.60-2.00	0.22-0.24	0.0-3.0	.37	.37			
	18-24	0-27	1.35-1.70	0.60-2.00	0.17-0.19	0.0-3.0	.37	.37			
	24-31	0-20	1.35-1.70	0.60-2.00	0.11-0.13	0.0-3.0	.20	.24			
	31-37	0-10	1.35-1.70	20.00-59.98	0.02-0.04	0.0-3.0	.15	.15			
	37-59	0-10	1.55-1.65	6.00-20.00	0.05-0.07	0.0-3.0	.15	.15			
	59-80	0-10	1.55-1.65	6.00-20.00	0.05-0.07	0.0-3.0	.15	.15			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
20C:											
Pence-----	0-2	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	3	3	86
	2-6	1-18	1.35-1.65	2.00-6.00	0.13-0.15	0.0-3.0	.24	.24			
	6-9	2-18	1.35-1.65	2.00-6.00	0.12-0.14	0.0-3.0	.20	.24			
	9-13	2-18	1.35-1.65	2.00-6.00	0.14-0.16	0.0-3.0	.20	.24			
	13-16	0-10	1.35-1.65	6.00-20.00	0.08-0.10	0.0-1.0	.15	.15			
	16-31	0-10	1.55-1.75	6.00-20.00	0.02-0.04	---	.15	.15			
	31-80	0-5	1.55-1.75	20.00-41.52	0.02-0.05	---	.05	.10			
21:											
Minocqua-----	0-4	---	0.15-0.45	2.00-6.00	0.35-0.45	---	.02	.02	4	8	0
	4-15	10-17	1.50-1.60	0.60-2.00	0.11-0.19	0.0-2.9	.37	.37			
	15-28	7-17	1.40-1.70	0.60-2.00	0.06-0.19	0.0-2.9	.32	.32			
	28-60	0-5	1.55-1.80	6.00-20.00	0.01-0.07	0.0-2.9	.10	.15			
Leafriver-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	3	2	134
	1-14	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	14-16	0-20	1.50-1.70	6.00-20.00	0.09-0.11	0.0-3.0	.15	.17			
	16-51	0-15	1.50-1.70	6.00-20.00	0.02-0.03	0.0-3.0	.10	.15			
23B:											
Chabeneau-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	5	5	56
	1-2	1-8	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37			
	2-5	1-8	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37			
	5-10	1-8	1.35-1.55	0.60-2.00	0.15-0.22	0.0-2.9	.32	.24			
	10-22	1-8	1.35-1.55	0.60-2.00	0.15-0.22	0.0-2.9	.32	.24			
	22-30	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
	30-48	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
	48-121	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
Karlin-----	0-1	---	0.10-0.20	6.00-19.99	0.45-0.55	---	---	---	4	3	86
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-2.9	.15	.15			
	4-15	0-18	1.30-1.70	2.00-6.00	0.12-0.19	0.0-2.9	.10	.10			
	15-29	0-10	1.40-1.70	6.00-19.99	0.06-0.11	0.0-2.9	.10	.10			
	29-80	0-5	1.55-1.75	6.00-19.99	0.05-0.07	0.0-2.9	.10	.10			
Pence-----	0-2	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	3	3	86
	2-6	1-18	1.35-1.65	2.00-6.00	0.13-0.15	0.0-3.0	.24	.24			
	6-9	2-18	1.35-1.65	2.00-6.00	0.12-0.14	0.0-3.0	.20	.24			
	9-13	2-18	1.35-1.65	2.00-6.00	0.14-0.16	0.0-3.0	.20	.24			
	13-16	0-10	1.35-1.65	6.00-20.00	0.08-0.10	0.0-1.0	.15	.15			
	16-31	0-10	1.55-1.75	6.00-20.00	0.02-0.04	---	.15	.15			
	31-80	0-5	1.55-1.75	20.00-41.52	0.02-0.05	---	.05	.10			
26B:											
Stambaugh-----	0-4	0-18	---	0.60-2.00	0.20-0.24	0.0-3.0	.28	.28	4	5	56
	4-10	0-18	1.35-1.65	0.60-2.00	0.20-0.24	0.0-3.0	.37	.37			
	10-18	0-18	1.35-1.65	0.60-2.00	0.20-0.24	0.0-3.0	.43	.43			
	18-22	0-18	1.35-1.65	0.60-2.00	0.17-0.22	0.0-3.0	.43	.43			
	22-39	0-18	1.35-1.65	0.60-2.00	0.17-0.22	0.0-3.0	.43	.43			
	39-50	0-10	1.50-1.70	20.00-59.94	0.01-0.04	0.0-3.0	.05	.10			
	50-80	0-10	1.50-1.70	20.00-59.94	0.01-0.04	0.0-3.0	.05	.10			
27:											
Lupton-----	0-8	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	5	2	134
	8-80	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
Tawas-----	0-22	---	0.20-0.30	2.00-6.00	0.35-0.45	---	---	---	4	2	134
	22-42	0-10	1.40-1.65	6.00-20.00	0.05-0.07	0.0-0.5	.15	.15			
	42-80	0-10	1.40-1.65	6.00-20.00	0.05-0.07	0.0-0.5	.15	.15			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
28:											
Dawson-----	0-4	---	0.04-0.15	0.20-6.00	0.55-0.65	---	.02	.02	2	7	0
	4-9	---	0.10-0.18	0.20-6.00	0.45-0.55	---	.02	.02			
	9-34	---	0.06-0.25	0.20-6.00	0.35-0.45	---	.02	.02			
	34-36	0-8	1.45-1.70	6.00-20.00	0.09-0.11	0.0-0.5	.17	.17			
	36-39	0-8	1.45-1.70	6.00-20.00	0.06-0.08	0.0-0.5	.17	.17			
	39-50	0-8	1.45-1.70	6.00-20.00	0.06-0.08	0.0-0.5	.15	.15			
	50-62	0-8	1.50-1.70	6.00-20.00	0.05-0.07	0.0-0.5	.15	.15			
Greenwood-----	0-8	---	0.05-0.15	5.95-19.98	0.55-0.65	---	.02	.02	3	8	0
	8-11	---	0.10-0.20	0.57-5.95	0.45-0.55	---	.02	.02			
	11-65	---	0.10-0.20	0.57-5.95	0.45-0.55	---	.02	.02			
	65-80	---	0.10-0.20	0.57-5.95	0.45-0.55	---	.02	.02			
Loxley-----	0-5	---	0.05-0.15	6.00-20.00	0.55-0.65	---	.02	.02	3	5	0
	5-45	---	0.20-0.30	0.20-6.00	0.35-0.45	---	.02	.02			
	45-80	---	0.10-0.20	0.60-6.00	0.45-0.55	---	.02	.02			
29B:											
Pence-----	0-2	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	3	3	86
	2-6	3-13	1.35-1.65	0.60-6.00	0.11-0.18	0.0-2.9	.24	.24			
	6-9	2-18	1.35-1.65	2.00-6.00	0.12-0.14	0.0-3.0	.20	.24			
	9-13	2-18	1.35-1.65	2.00-6.00	0.14-0.16	0.0-3.0	.20	.24			
	13-16	0-18	1.35-1.65	6.00-20.00	0.08-0.10	0.0-3.0	.15	.15			
	16-31	0-14	1.55-1.75	6.00-20.00	0.02-0.04	---	.15	.15			
	31-80	0-14	1.55-1.75	20.00-41.52	0.02-0.05	---	.05	.10			
31:											
Evart-----	0-2	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	4	2	134
	2-9	0-40	1.35-1.50	0.60-2.00	0.18-0.20	0.0-3.0	.28	.32			
	9-19	0-27	1.35-1.50	2.00-6.00	0.10-0.12	0.0-3.0	.17	.24			
	19-33	0-15	1.40-1.65	6.00-20.00	0.05-0.07	0.0-3.0	.10	.17			
	33-55	0-15	1.40-1.65	6.00-20.00	0.01-0.03	0.0-3.0	.05	.10			
Tawas-----	0-22	---	0.20-0.30	2.00-6.00	0.35-0.45	---	---	---	4	2	134
	22-42	0-10	1.40-1.65	6.00-20.00	0.05-0.07	0.0-0.5	.15	.15			
	42-80	0-10	1.40-1.65	6.00-20.00	0.05-0.07	0.0-0.5	.15	.15			
32A:											
Net-----	0-2	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	2-5	2-12	1.30-1.70	0.60-2.00	0.16-0.20	0.0-2.9	.28	.37			
	5-6	2-12	1.40-1.65	0.60-2.00	0.06-0.21	0.0-2.9	.28	.37			
	6-7	2-12	1.40-1.65	0.60-2.00	0.06-0.21	0.0-2.9	.28	.37			
	7-15	2-12	1.40-1.65	0.60-2.00	0.06-0.21	0.0-2.9	.28	.37			
	15-23	2-12	1.40-1.65	0.60-2.00	0.06-0.21	0.0-2.9	.28	.37			
	23-39	2-10	1.80-2.05	0.00-0.06	0.01-0.02	0.0-2.9	.20	.28			
	39-60	2-10	1.30-1.70	0.60-6.00	0.01-0.02	0.0-2.9	.20	.28			
35A:											
Beechwood-----	0-6	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	5	3	86
	6-8	2-20	1.20-1.50	0.60-6.00	0.16-0.24	0.0-3.0	.37	.37			
	8-10	2-20	1.35-1.60	0.60-6.00	0.15-0.22	0.0-3.0	.32	.32			
	10-20	2-20	1.35-1.60	0.60-6.00	0.15-0.22	0.0-3.0	.24	.28			
	20-28	2-20	1.35-1.60	0.60-6.00	0.15-0.22	0.0-3.0	.24	.28			
	28-42	2-20	1.35-1.60	0.60-6.00	0.11-0.19	0.0-3.0	.20	.28			
	42-80	2-20	1.55-1.70	0.60-6.00	0.10-0.18	0.0-3.0	.20	.28			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
36:											
Gay-----	0-4	---	0.20-0.30	0.60-6.00	0.35-0.45	---	---	---	5	3	86
	4-7	2-10	1.10-1.50	0.60-2.00	0.07-0.18	0.0-2.9	.24	.24			
	7-11	2-10	1.10-1.60	0.60-2.00	0.07-0.15	0.0-2.9	.24	.24			
	11-16	6-18	1.50-1.85	0.60-2.00	0.10-0.18	0.0-2.9	.28	.28			
	16-30	6-15	1.70-1.80	0.60-2.00	0.09-0.13	0.0-2.9	.28	.28			
	30-80	6-12	1.70-1.80	0.60-2.00	0.09-0.13	0.0-2.9	.28	.28			
Pleine-----	0-9	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	5	8	0
	9-20	5-15	1.10-1.35	0.60-2.00	0.16-0.22	0.0-2.9	.24	.28			
	20-33	5-15	1.50-1.85	0.60-2.00	0.15-0.19	0.0-2.9	.24	.28			
	33-80	5-15	1.55-1.70	0.60-2.00	0.11-0.16	0.0-2.9	.24	.28			
37B:											
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
Tula-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-5	2-18	1.20-1.50	0.60-2.00	0.10-0.20	0.0-3.0	.15	.28			
	5-8	2-18	1.20-1.50	0.60-2.00	0.10-0.20	0.0-3.0	.15	.28			
	8-20	2-18	1.35-1.60	0.60-2.00	0.10-0.18	0.0-3.0	.15	.28			
	20-28	2-18	1.35-1.60	0.60-2.00	0.08-0.15	0.0-3.0	.15	.28			
	28-37	2-18	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.15	.28			
	37-62	2-20	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.24	.37			
	62-80	2-18	1.55-1.70	0.60-2.00	0.07-0.14	0.0-3.0	.15	.15			
Lupton-----	0-20	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	5	2	134
	20-80	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
38B:											
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	0-5	1.60-1.80	6.00-20.00	0.03-0.05	---	.10	.15			
38C:											
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	0-5	1.60-1.80	6.00-20.00	0.03-0.05	---	.10	.15			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
38D:											
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	0-5	1.60-1.80	6.00-20.00	0.03-0.05	---	.10	.15			
39B:											
Gogebic-----	0-1	---	0.05-0.15	0.60-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	0-5	1.60-1.80	6.00-20.00	0.03-0.05	---	.10	.15			
39C:											
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	0-5	1.60-1.80	6.00-20.00	0.03-0.05	---	.10	.15			
39D:											
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	0-5	1.60-1.80	6.00-20.00	0.03-0.05	---	.10	.15			
41:											
Lupton-----	0-20	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	3	2	134
	20-80	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
Pleine-----	0-9	---	0.20-0.30	6.00-20.00	0.35-0.45	---	.02	.02	5	8	0
	9-20	5-15	1.10-1.35	0.60-2.00	0.16-0.22	0.0-2.9	.24	.28			
	20-33	5-15	1.50-1.85	0.60-2.00	0.15-0.19	0.0-2.9	.24	.28			
	33-80	5-15	1.55-1.70	0.60-2.00	0.11-0.16	0.0-2.9	.24	.28			
Cathro-----	0-6	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	2	8	0
	6-31	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	31-80	5-30	1.70-1.80	0.60-2.00	0.10-0.22	0.0-3.0	.20	.28			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
42:											
Ausable-----	0-8	---	0.20-0.30	0.60-6.00	0.35-0.45	---	---	---	3	2	134
	8-16	0-15	1.40-1.65	6.00-20.00	0.06-0.08	0.0-1.0	.15	.15			
	16-25	0-15	1.40-1.65	6.00-20.00	0.09-0.11	0.0-1.0	.17	.17			
	25-36	0-15	1.40-1.65	6.00-20.00	0.04-0.05	0.0-1.0	.05	.10			
	36-45	0-15	1.40-1.65	6.00-20.00	0.03-0.04	0.0-1.0	.05	.10			
	45-80	0-15	1.40-1.65	20.00-99.90	0.03-0.05	0.0-1.0	.05	.10			
Tawas-----	0-22	---	0.20-0.30	2.00-6.00	0.35-0.45	---	---	---	4	2	134
	22-42	0-10	1.40-1.65	6.00-20.00	0.05-0.07	0.0-0.5	.15	.15			
	42-80	0-10	1.40-1.65	6.00-20.00	0.05-0.07	0.0-0.5	.15	.15			
43B:											
Karlin-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	2	134
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.18	0.0-1.0	.15	.15			
	4-15	0-10	1.30-1.70	2.00-6.00	0.12-0.17	0.0-1.0	.10	.10			
	15-29	0-5	1.40-1.70	6.00-20.00	0.06-0.11	0.0-1.0	.10	.10			
	29-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.10	.10			
Pence-----	0-2	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	2	134
	2-6	1-18	1.35-1.65	2.00-6.00	0.13-0.15	0.0-3.0	.24	.24			
	6-9	2-18	1.35-1.65	2.00-6.00	0.12-0.14	0.0-3.0	.20	.24			
	9-13	2-18	1.35-1.65	2.00-6.00	0.14-0.16	0.0-3.0	.20	.24			
	13-16	0-10	1.35-1.65	6.00-20.00	0.08-0.10	0.0-1.0	.15	.15			
	16-31	0-10	1.55-1.75	6.00-20.00	0.02-0.04	---	.15	.15			
	31-80	0-5	1.55-1.75	20.00-40.00	0.02-0.05	---	.05	.10			
43C:											
Karlin-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	2	134
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.18	0.0-1.0	.15	.15			
	4-15	0-10	1.30-1.70	2.00-6.00	0.12-0.17	0.0-1.0	.10	.10			
	15-29	0-5	1.40-1.70	6.00-20.00	0.06-0.11	0.0-1.0	.10	.10			
	29-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.10	.10			
Pence-----	0-2	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	2	134
	2-6	1-18	1.35-1.65	2.00-6.00	0.13-0.15	0.0-3.0	.24	.24			
	6-9	2-18	1.35-1.65	2.00-6.00	0.12-0.14	0.0-3.0	.20	.24			
	9-13	2-18	1.35-1.65	2.00-6.00	0.14-0.16	0.0-3.0	.20	.24			
	13-16	0-10	1.35-1.65	6.00-20.00	0.08-0.10	0.0-1.0	.15	.15			
	16-31	0-10	1.55-1.75	6.00-20.00	0.02-0.04	---	.15	.15			
	31-80	0-5	1.55-1.75	20.00-40.00	0.02-0.05	---	.05	.10			
43D:											
Karlin-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	2	134
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.18	0.0-1.0	.15	.15			
	4-15	0-10	1.30-1.70	2.00-6.00	0.12-0.17	0.0-1.0	.10	.10			
	15-29	0-5	1.40-1.70	6.00-20.00	0.06-0.11	0.0-1.0	.10	.10			
	29-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.10	.10			
Pence-----	0-2	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	2	134
	2-6	1-18	1.35-1.65	2.00-6.00	0.13-0.15	0.0-3.0	.24	.24			
	6-9	2-18	1.35-1.65	2.00-6.00	0.12-0.14	0.0-3.0	.20	.24			
	9-13	2-18	1.35-1.65	2.00-6.00	0.14-0.16	0.0-3.0	.20	.24			
	13-16	0-10	1.35-1.65	6.00-20.00	0.08-0.10	0.0-1.0	.15	.15			
	16-31	0-10	1.55-1.75	6.00-20.00	0.02-0.04	---	.15	.15			
	31-80	0-5	1.55-1.75	20.00-40.00	0.02-0.05	---	.05	.10			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
44B:											
Karlin-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	2	134
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.18	0.0-1.0	.15	.15			
	4-15	0-10	1.30-1.70	2.00-6.00	0.12-0.17	0.0-1.0	.10	.10			
	15-29	0-5	1.40-1.70	6.00-20.00	0.06-0.11	0.0-1.0	.10	.10			
	29-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.10	.10			
Keweenaw-----	0-2	---	0.20-0.30	2.00-6.00	0.35-0.45	---	---	---	5	2	134
	2-4	0-10	1.35-1.65	0.60-2.00	0.05-0.12	---	.10	.17			
	4-6	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	6-25	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	25-45	0-10	1.30-1.80	0.60-2.00	0.03-0.10	---	.15	.15			
	45-56	0-10	1.30-1.80	0.60-2.00	0.05-0.08	---	.15	.15			
	56-71	0-10	1.30-1.80	0.60-2.00	0.03-0.07	---	.15	.15			
	71-90	0-10	1.55-1.80	0.60-2.00	0.05-0.16	---	.20	.24			
Sarona-----	0-3	2-18	1.30-1.60	2.00-6.00	0.15-0.18	0.0-3.0	.20	.24	5	3	86
	3-6	2-18	1.30-1.60	2.00-6.00	0.15-0.18	0.0-3.0	.20	.24			
	6-14	2-18	1.35-1.70	2.00-6.00	0.14-0.17	0.0-3.0	.20	.24			
	14-21	2-18	1.35-1.70	2.00-6.00	0.14-0.17	0.0-3.0	.15	.17			
	21-28	2-18	1.40-1.70	2.00-6.00	0.14-0.17	0.0-3.0	.20	.24			
	28-47	0-18	1.50-1.75	0.60-2.00	0.11-0.14	0.0-3.0	.24	.28			
	47-75	0-18	1.60-1.80	2.00-6.00	0.10-0.13	0.0-3.0	.24	.28			
	75-90	0-18	1.60-1.90	0.00-0.06	0.10-0.13	0.0-3.0	.24	.28			
44C:											
Karlin-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	2	134
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.18	0.0-1.0	.15	.15			
	4-15	0-10	1.30-1.70	2.00-6.00	0.12-0.17	0.0-1.0	.10	.10			
	15-29	0-5	1.40-1.70	6.00-20.00	0.06-0.11	0.0-1.0	.10	.10			
	29-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.10	.10			
Keweenaw-----	0-2	---	0.20-0.30	2.00-6.00	0.35-0.45	---	---	---	5	2	134
	2-4	0-10	1.35-1.65	0.60-2.00	0.05-0.12	---	.10	.17			
	4-6	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	6-25	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	25-45	0-10	1.30-1.80	0.60-2.00	0.03-0.10	---	.15	.15			
	45-56	0-10	1.30-1.80	0.60-2.00	0.05-0.08	---	.15	.15			
	56-71	0-10	1.30-1.80	0.60-2.00	0.03-0.07	---	.15	.15			
	71-90	0-10	1.55-1.80	0.60-2.00	0.05-0.16	---	.20	.24			
Sarona-----	0-3	2-18	1.30-1.60	2.00-6.00	0.15-0.18	0.0-3.0	.20	.24	5	3	86
	3-6	2-18	1.30-1.60	2.00-6.00	0.15-0.18	0.0-3.0	.20	.24			
	6-14	2-18	1.35-1.70	2.00-6.00	0.14-0.17	0.0-3.0	.20	.24			
	14-21	2-18	1.35-1.70	2.00-6.00	0.14-0.17	0.0-3.0	.15	.17			
	21-28	2-18	1.40-1.70	2.00-6.00	0.14-0.17	0.0-3.0	.20	.24			
	28-47	0-18	1.50-1.75	0.60-2.00	0.11-0.14	0.0-3.0	.24	.28			
	47-75	0-18	1.60-1.80	2.00-6.00	0.10-0.13	0.0-3.0	.24	.28			
	75-90	0-18	1.60-1.90	0.00-0.06	0.10-0.13	0.0-3.0	.24	.28			
44D:											
Karlin-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	2	134
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.18	0.0-1.0	.15	.15			
	4-15	0-10	1.30-1.70	2.00-6.00	0.12-0.17	0.0-1.0	.10	.10			
	15-29	0-5	1.40-1.70	6.00-20.00	0.06-0.11	0.0-1.0	.10	.10			
	29-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.10	.10			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
44D:											
Keweenaw-----	0-2	---	0.20-0.30	2.00-6.00	0.35-0.45	---	---	---	5	2	134
	2-4	0-10	1.35-1.65	0.60-2.00	0.05-0.12	---	.10	.17			
	4-6	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	6-25	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	25-45	0-10	1.30-1.80	0.60-2.00	0.03-0.10	---	.15	.15			
	45-56	0-10	1.30-1.80	0.60-2.00	0.05-0.08	---	.15	.15			
	56-71	0-10	1.30-1.80	0.60-2.00	0.03-0.07	---	.15	.15			
	71-90	0-10	1.55-1.80	0.60-2.00	0.05-0.16	---	.20	.24			
Sarona-----	0-3	2-18	1.30-1.60	2.00-6.00	0.15-0.18	0.0-3.0	.20	.24	5	3	86
	3-6	2-18	1.30-1.60	2.00-6.00	0.15-0.18	0.0-3.0	.20	.24			
	6-14	2-18	1.35-1.70	2.00-6.00	0.14-0.17	0.0-3.0	.20	.24			
	14-21	2-18	1.35-1.70	2.00-6.00	0.14-0.17	0.0-3.0	.15	.17			
	21-28	2-18	1.40-1.70	2.00-6.00	0.14-0.17	0.0-3.0	.20	.24			
	28-47	0-18	1.50-1.75	0.60-2.00	0.11-0.14	0.0-3.0	.24	.28			
	47-75	0-18	1.60-1.80	2.00-6.00	0.10-0.13	0.0-3.0	.24	.28			
	75-90	0-18	1.60-1.90	0.00-0.06	0.10-0.13	0.0-3.0	.24	.28			
46C:											
Amasa-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-4	3-20	1.30-1.60	0.60-2.00	0.18-0.19	0.0-2.0	.24	.37			
	4-7	3-20	1.35-1.70	0.60-2.00	0.21-0.23	0.0-2.0	.37	.43			
	7-23	1-15	1.35-1.70	0.60-2.00	0.16-0.18	0.0-1.0	.37	.43			
	23-28	1-15	1.35-1.70	0.60-2.00	0.14-0.15	0.0-1.0	.17	.24			
	28-41	0-5	1.55-1.65	6.00-20.00	0.05-0.06	---	.10	.15			
	41-80	0-5	1.55-1.65	6.00-20.00	0.03-0.04	---	.05	.15			
Karlin-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.18	0.0-1.0	.15	.15			
	4-15	0-10	1.30-1.70	2.00-6.00	0.12-0.17	0.0-1.0	.10	.10			
	15-29	0-5	1.40-1.70	6.00-20.00	0.06-0.11	0.0-1.0	.10	.10			
	29-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.10	.10			
46D:											
Amasa-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-4	3-20	1.30-1.60	0.60-2.00	0.18-0.19	0.0-2.0	.24	.37			
	4-7	3-20	1.35-1.70	0.60-2.00	0.21-0.23	0.0-2.0	.37	.43			
	7-23	1-15	1.35-1.70	0.60-2.00	0.16-0.18	0.0-1.0	.37	.43			
	23-28	1-15	1.35-1.70	0.60-2.00	0.14-0.15	0.0-1.0	.17	.24			
	28-41	0-5	1.55-1.65	6.00-20.00	0.05-0.06	---	.10	.15			
	41-80	0-5	1.55-1.65	6.00-20.00	0.03-0.04	---	.05	.15			
Karlin-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.18	0.0-1.0	.15	.15			
	4-15	0-10	1.30-1.70	2.00-6.00	0.12-0.17	0.0-1.0	.10	.10			
	15-29	0-5	1.40-1.70	6.00-20.00	0.06-0.11	0.0-1.0	.10	.10			
	29-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.10	.10			
46E:											
Amasa-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-4	3-20	1.30-1.60	0.60-2.00	0.18-0.19	0.0-2.0	.24	.37			
	4-7	3-20	1.35-1.70	0.60-2.00	0.21-0.23	0.0-2.0	.37	.43			
	7-23	1-15	1.35-1.70	0.60-2.00	0.16-0.18	0.0-1.0	.37	.43			
	23-28	1-15	1.35-1.70	0.60-2.00	0.14-0.15	0.0-1.0	.17	.24			
	28-41	0-5	1.55-1.65	6.00-20.00	0.05-0.06	---	.10	.15			
	41-80	0-5	1.55-1.65	6.00-20.00	0.03-0.04	---	.05	.15			
Karlin-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.18	0.0-1.0	.15	.15			
	4-15	0-10	1.30-1.70	2.00-6.00	0.12-0.17	0.0-1.0	.10	.10			
	15-29	0-5	1.40-1.70	6.00-20.00	0.06-0.11	0.0-1.0	.10	.10			
	29-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.10	.10			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
46F:											
Amasa-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-4	3-20	1.30-1.60	0.60-2.00	0.18-0.19	0.0-2.0	.24	.37			
	4-7	0-28	1.35-1.70	0.60-2.00	0.21-0.23	0.0-3.0	.37	.43			
	7-23	15-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.37	.43			
	23-28	15-20	1.35-1.70	0.60-2.00	0.14-0.15	0.0-3.0	.17	.24			
	28-41	0-10	1.55-1.65	6.00-20.00	0.05-0.06	0.0-3.0	.10	.15			
	41-80	0-10	1.55-1.65	6.00-20.00	0.03-0.04	0.0-3.0	.05	.15			
Karlin-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-2.9	.15	.15			
	4-15	0-18	1.30-1.70	2.00-6.00	0.12-0.19	0.0-2.9	.10	.10			
	15-29	0-10	1.40-1.70	6.00-20.00	0.06-0.11	0.0-2.9	.10	.10			
	29-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	0.0-2.9	.10	.10			
47B:											
Karlin-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.18	0.0-1.0	.15	.15			
	4-15	0-10	1.30-1.70	2.00-6.00	0.12-0.17	0.0-1.0	.10	.10			
	15-29	0-5	1.40-1.70	6.00-20.00	0.06-0.11	0.0-1.0	.10	.10			
	29-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.10	.10			
Noseum-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-4	1-15	1.35-1.65	2.00-6.00	0.15-0.18	0.0-1.0	.24	.24			
	4-6	1-15	1.30-1.70	2.00-6.00	0.14-0.17	0.0-1.0	.24	.24			
	6-14	1-15	1.30-1.70	2.00-6.00	0.14-0.17	0.0-1.0	.24	.24			
	14-24	0-10	1.30-1.70	6.00-20.00	0.14-0.17	0.0-1.0	.17	.17			
	24-37	0-5	1.30-1.70	6.00-20.00	0.05-0.07	---	.15	.15			
	37-63	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.15	.15			
	63-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.15	.15			
Gay-----	0-4	---	0.20-0.30	0.60-6.00	0.35-0.45	---	---	---	5	3	86
	4-7	2-10	1.10-1.50	0.60-2.00	0.07-0.18	0.0-2.9	.24	.24			
	7-11	2-10	1.10-1.60	0.60-2.00	0.07-0.15	0.0-2.9	.24	.24			
	11-16	6-18	1.50-1.85	0.60-2.00	0.10-0.18	0.0-2.9	.28	.28			
	16-30	6-15	1.70-1.80	0.60-2.00	0.09-0.13	0.0-2.9	.28	.28			
	30-80	6-12	1.70-1.80	0.60-2.00	0.09-0.13	0.0-2.9	.28	.28			
48C:											
Karlin-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.18	0.0-1.0	.15	.15			
	4-15	0-10	1.30-1.70	2.00-6.00	0.12-0.17	0.0-1.0	.10	.10			
	15-29	0-5	1.40-1.70	6.00-20.00	0.06-0.11	0.0-1.0	.10	.10			
	29-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.10	.10			
Michigamme-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	4	5	56
	1-2	0-20	1.30-1.60	2.00-6.00	0.11-0.12	0.0-3.0	.10	.24			
	2-4	0-20	1.30-1.60	0.60-2.00	0.15-0.16	0.0-3.0	.20	.43			
	4-7	0-20	1.35-1.70	0.60-2.00	0.18-0.20	0.0-3.0	.28	.43			
	7-14	0-20	1.35-1.70	0.60-2.00	0.15-0.16	0.0-3.0	.24	.43			
	14-20	0-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.28	.43			
	20-24	0-20	1.35-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.15	.43			
	24-31	0-20	1.60-1.80	0.00-0.06	0.11-0.13	0.0-3.0	.15	.28			
	31-80	---	---	0.00-0.01	---	---	---	---			
48F:											
Karlin-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-2.9	.15	.15			
	4-15	0-18	1.30-1.70	2.00-6.00	0.12-0.19	0.0-2.9	.10	.10			
	15-29	0-10	1.40-1.70	6.00-20.00	0.06-0.11	0.0-2.9	.10	.10			
	29-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	0.0-2.9	.10	.10			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
48F:											
Michigamme-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	4	3	86
	1-2	0-20	1.30-1.60	2.00-6.00	0.11-0.12	0.0-3.0	.10	.24			
	2-4	0-20	1.30-1.60	0.60-2.00	0.15-0.16	0.0-3.0	.20	.43			
	4-7	0-20	1.35-1.70	0.60-2.00	0.18-0.20	0.0-3.0	.28	.43			
	7-14	0-20	1.35-1.70	0.60-2.00	0.15-0.16	0.0-3.0	.24	.43			
	14-20	0-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.28	.43			
	20-24	0-20	1.35-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.15	.43			
	24-31	0-20	1.60-1.80	0.00-0.06	0.11-0.13	0.0-3.0	.15	.28			
	31-80	---	---	---	---	---	---	---			
49B:											
Pelissier-----	0-2	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	3	3	86
	2-6	2-8	1.30-1.60	2.00-6.00	0.06-0.13	0.0-0.5	.15	.24			
	6-10	2-8	1.30-1.65	2.00-6.00	0.06-0.13	0.0-0.5	.15	.24			
	10-21	0-5	1.30-1.70	6.00-20.00	0.03-0.09	---	.05	.15			
	21-36	0-3	1.55-1.65	20.00-28.34	0.01-0.07	---	.05	.15			
	36-80	0-3	1.55-1.65	20.00-28.34	0.01-0.07	---	.05	.15			
Sarwet-----	0-2	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	3	86
	2-3	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---			
	3-7	1-20	1.30-1.60	0.60-6.00	0.16-0.18	0.0-3.0	.24	.24			
	7-14	1-20	1.35-1.70	0.60-6.00	0.16-0.18	0.0-3.0	.28	.28			
	14-22	1-20	1.35-1.70	0.60-6.00	0.15-0.17	0.0-3.0	.28	.28			
	22-28	1-20	1.35-1.70	0.60-6.00	0.09-0.11	0.0-3.0	.17	.17			
	28-38	1-20	1.35-1.70	0.60-6.00	0.09-0.11	0.0-3.0	.17	.17			
	38-47	0-20	1.60-1.80	0.60-6.00	0.05-0.07	0.0-3.0	.15	.15			
	47-50	1-25	1.60-1.80	0.60-6.00	0.14-0.16	0.0-3.0	.32	.37			
	50-80	0-20	1.60-1.80	0.60-6.00	0.08-0.09	0.0-3.0	.15	.17			
49C:											
Pelissier-----	0-2	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	3	3	86
	2-6	2-8	1.30-1.60	2.00-6.00	0.06-0.13	0.0-0.5	.15	.24			
	6-10	2-8	1.30-1.65	2.00-6.00	0.06-0.13	0.0-0.5	.15	.24			
	10-21	0-5	1.30-1.70	6.00-20.00	0.03-0.09	---	.05	.15			
	21-36	0-3	1.55-1.65	20.00-28.34	0.01-0.07	---	.05	.15			
	36-80	0-3	1.55-1.65	20.00-28.34	0.01-0.07	---	.05	.15			
Sarwet-----	0-2	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	3	86
	2-3	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---			
	3-7	1-20	1.30-1.60	0.60-6.00	0.16-0.18	0.0-3.0	.24	.24			
	7-14	1-20	1.35-1.70	0.60-6.00	0.16-0.18	0.0-3.0	.28	.28			
	14-22	1-20	1.35-1.70	0.60-6.00	0.15-0.17	0.0-3.0	.28	.28			
	22-28	1-20	1.35-1.70	0.60-6.00	0.09-0.11	0.0-3.0	.17	.17			
	28-38	1-20	1.35-1.70	0.60-6.00	0.09-0.11	0.0-3.0	.17	.17			
	38-47	0-20	1.60-1.80	0.60-6.00	0.05-0.07	0.0-3.0	.15	.15			
	47-50	1-25	1.60-1.80	0.60-6.00	0.14-0.16	0.0-3.0	.32	.37			
	50-80	0-20	1.60-1.80	0.60-6.00	0.08-0.09	0.0-3.0	.15	.17			
49D:											
Pelissier-----	0-2	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	3	3	86
	2-6	2-8	1.30-1.60	2.00-6.00	0.06-0.13	0.0-0.5	.15	.24			
	6-10	2-8	1.30-1.65	2.00-6.00	0.06-0.13	0.0-0.5	.15	.24			
	10-21	0-5	1.30-1.70	6.00-20.00	0.03-0.09	---	.05	.15			
	21-36	0-3	1.55-1.65	20.00-28.34	0.01-0.07	---	.05	.15			
	36-80	0-3	1.55-1.65	20.00-28.34	0.01-0.07	---	.05	.15			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
52B:											
Pence-----	0-2	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	3	3	86
	2-6	1-18	1.35-1.65	2.00-6.00	0.13-0.15	0.0-3.0	.24	.24			
	6-9	2-18	1.35-1.65	2.00-6.00	0.12-0.14	0.0-3.0	.20	.24			
	9-13	2-18	1.35-1.65	2.00-6.00	0.14-0.16	0.0-3.0	.20	.24			
	13-16	0-10	1.35-1.65	6.00-20.00	0.08-0.10	0.0-1.0	.15	.15			
	16-31	0-10	1.55-1.75	6.00-20.00	0.02-0.04	---	.15	.15			
	31-80	0-5	1.55-1.75	20.00-40.00	0.02-0.05	---	.05	.10			
Vilas-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	3	2	134
	2-4	0-15	1.35-1.65	6.00-20.00	0.10-0.12	0.0-3.0	.17	.17			
	4-7	0-15	1.30-1.70	6.00-20.00	0.10-0.12	0.0-3.0	.17	.17			
	7-17	0-15	1.30-1.70	6.00-20.00	0.09-0.11	0.0-3.0	.17	.17			
	17-22	0-10	1.30-1.70	6.00-20.00	0.03-0.05	0.0-3.0	.15	.15			
	22-35	0-10	1.30-1.70	6.00-20.00	0.06-0.08	0.0-3.0	.15	.15			
	35-80	0-10	1.55-1.75	6.00-20.00	0.02-0.04	0.0-3.0	.15	.15			
52C:											
Pence-----	0-2	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	3	3	86
	2-6	1-18	1.35-1.65	2.00-6.00	0.13-0.15	0.0-3.0	.24	.24			
	6-9	2-18	1.35-1.65	2.00-6.00	0.12-0.14	0.0-3.0	.20	.24			
	9-13	2-18	1.35-1.65	2.00-6.00	0.14-0.16	0.0-3.0	.20	.24			
	13-16	0-10	1.35-1.65	6.00-20.00	0.08-0.10	0.0-1.0	.15	.15			
	16-31	0-10	1.55-1.75	6.00-20.00	0.02-0.04	---	.15	.15			
	31-80	0-5	1.55-1.75	20.00-40.00	0.02-0.05	---	.05	.10			
Vilas-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	3	2	134
	2-4	0-15	1.35-1.65	6.00-20.00	0.10-0.12	0.0-3.0	.17	.17			
	4-7	0-15	1.30-1.70	6.00-20.00	0.10-0.12	0.0-3.0	.17	.17			
	7-17	0-15	1.30-1.70	6.00-20.00	0.09-0.11	0.0-3.0	.17	.17			
	17-22	0-10	1.30-1.70	6.00-20.00	0.03-0.05	0.0-3.0	.15	.15			
	22-35	0-10	1.30-1.70	6.00-20.00	0.06-0.08	0.0-3.0	.15	.15			
	35-80	0-10	1.55-1.75	6.00-20.00	0.02-0.04	0.0-3.0	.15	.15			
53B:											
Manitowish-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	4	3	86
	1-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---			
	2-4	0-10	1.35-1.65	0.60-2.00	0.13-0.15	0.0-3.0	.17	.24			
	4-5	0-18	1.30-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.17	.24			
	5-11	0-18	1.30-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.17	.24			
	11-22	0-18	1.30-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.17	.24			
	22-40	0-14	1.55-1.75	2.00-6.00	0.06-0.08	0.0-3.0	.10	.17			
	40-80	0-8	1.55-1.75	6.00-20.00	0.04-0.06	---	.10	.15			
Croswell-----	0-3	0-14	1.30-1.55	6.00-20.00	0.07-0.09	---	.15	.15	2	1	220
	3-7	0-14	1.30-1.55	6.00-20.00	0.07-0.09	---	.15	.15			
	7-34	0-10	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	34-80	0-10	1.55-1.65	6.00-20.00	0.05-0.07	---	.15	.15			
57B:											
Karlin-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	5	2	134
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-2.9	.15	.15			
	4-15	0-18	1.30-1.70	2.00-6.00	0.12-0.19	0.0-2.9	.10	.10			
	15-29	0-10	1.40-1.70	6.00-20.00	0.06-0.11	0.0-2.9	.10	.10			
	29-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	0.0-2.9	.10	.10			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
57B:											
Manitowish-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	4	3	86
	1-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---			
	2-4	0-10	1.35-1.65	0.60-2.00	0.13-0.15	0.0-3.0	.17	.24			
	4-5	0-18	1.30-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.17	.24			
	5-11	0-18	1.30-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.17	.24			
	11-22	0-18	1.30-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.17	.24			
	22-40	0-14	1.55-1.75	2.00-6.00	0.06-0.08	0.0-3.0	.10	.17			
	40-80	0-8	1.55-1.75	6.00-20.00	0.04-0.06	---	.10	.15			
57C:											
Karlins-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	5	2	134
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-2.9	.15	.15			
	4-15	0-18	1.30-1.70	2.00-6.00	0.12-0.19	0.0-2.9	.10	.10			
	15-29	0-10	1.40-1.70	6.00-20.00	0.06-0.11	0.0-2.9	.10	.10			
	29-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	0.0-2.9	.10	.10			
Manitowish-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	4	3	86
	1-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---			
	2-4	0-10	1.35-1.65	0.60-2.00	0.13-0.15	0.0-3.0	.17	.24			
	4-5	0-18	1.30-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.17	.24			
	5-11	0-18	1.30-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.17	.24			
	11-22	0-18	1.30-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.17	.24			
	22-40	0-14	1.55-1.75	2.00-6.00	0.06-0.08	0.0-3.0	.10	.17			
	40-80	0-8	1.55-1.75	6.00-20.00	0.04-0.06	---	.10	.15			
58B:											
Vilas-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	3	2	134
	2-4	0-15	1.35-1.65	6.00-20.00	0.10-0.12	0.0-3.0	.17	.17			
	4-7	0-15	1.30-1.70	6.00-20.00	0.10-0.12	0.0-3.0	.17	.17			
	7-17	0-15	1.30-1.70	6.00-20.00	0.09-0.11	0.0-3.0	.17	.17			
	17-22	0-10	1.30-1.70	6.00-20.00	0.03-0.05	0.0-3.0	.15	.15			
	22-35	0-10	1.30-1.70	6.00-20.00	0.06-0.08	0.0-3.0	.15	.15			
	35-80	0-10	1.55-1.75	6.00-20.00	0.02-0.04	0.0-3.0	.15	.15			
Croswell-----	0-3	0-14	1.30-1.55	6.00-20.00	0.07-0.09	---	.15	.15	2	1	220
	3-7	0-14	1.30-1.55	6.00-20.00	0.07-0.09	---	.15	.15			
	7-34	0-14	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	34-80	0-14	1.55-1.65	6.00-20.00	0.05-0.07	---	.15	.15			
Pence-----	0-2	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	3	3	86
	2-6	1-18	1.35-1.65	2.00-6.00	0.13-0.15	0.0-3.0	.24	.24			
	6-9	2-18	1.35-1.65	2.00-6.00	0.12-0.14	0.0-3.0	.20	.24			
	9-13	2-18	1.35-1.65	2.00-6.00	0.14-0.16	0.0-3.0	.20	.24			
	13-16	0-10	1.35-1.65	6.00-20.00	0.08-0.10	0.0-1.0	.15	.15			
	16-31	0-10	1.55-1.75	6.00-20.00	0.02-0.04	---	.15	.15			
	31-80	0-5	1.55-1.75	20.00-40.00	0.02-0.05	---	.05	.10			
61:											
Tawas-----	0-22	---	0.20-0.30	2.00-6.00	0.35-0.45	---	---	---	4	2	134
	22-42	0-10	1.40-1.65	6.00-20.00	0.05-0.07	0.0-0.5	.15	.15			
	42-80	0-10	1.40-1.65	6.00-20.00	0.05-0.07	0.0-0.5	.15	.15			
Kinross-----	0-5	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	2	8	0
	5-10	0-14	0.91-1.50	6.00-20.00	0.07-0.09	---	.15	.15			
	10-12	0-14	1.45-1.70	6.00-20.00	0.06-0.08	---	.15	.15			
	12-30	0-14	1.45-1.70	6.00-20.00	0.06-0.08	---	.15	.15			
	30-41	0-12	1.45-1.70	6.00-20.00	0.06-0.08	---	.15	.15			
	41-80	0-8	1.50-1.70	6.00-20.00	0.05-0.07	---	.15	.15			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
62B:											
Pelkie-----	0-8	0-15	1.40-1.65	6.00-20.00	0.10-0.12	0.0-3.0	.24	.24	2	2	134
	8-32	0-10	1.40-1.65	6.00-20.00	0.05-0.07	0.0-3.0	.15	.15			
	32-80	0-10	1.40-1.65	6.00-20.00	0.05-0.07	0.0-3.0	.15	.15			
83:											
Bowstring-----	0-13	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	5	2	134
	13-15	0-27	1.46-1.80	0.60-2.00	0.20-0.22	0.0-3.0	.43	.43			
	15-32	---	0.06-0.25	0.20-0.60	0.35-0.45	---	---	---			
	32-36	---	0.10-0.18	0.60-6.00	0.45-0.55	---	---	---			
	36-42	0-20	1.46-1.80	2.00-6.00	0.14-0.16	0.0-2.0	.28	.28			
	42-80	0-10	1.46-1.80	6.00-20.00	0.02-0.03	0.0-2.0	.05	.10			
141D:											
Oldman-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-3	5-15	1.30-1.60	2.00-6.00	0.06-0.21	0.0-3.0	.20	.32			
	3-23	5-15	1.35-1.70	2.00-6.00	0.05-0.20	0.0-3.0	.15	.37			
	23-28	1-10	1.80-2.15	0.00-0.06	0.03-0.13	0.0-1.0	.10	.28			
	28-43	1-10	1.80-2.15	0.00-0.06	0.03-0.13	0.0-1.0	.10	.28			
	43-58	1-10	1.80-2.15	0.20-0.60	0.03-0.13	0.0-1.0	.05	.17			
	58-80	1-10	1.80-2.15	0.20-0.60	0.03-0.13	0.0-1.0	.15	.17			
141E:											
Oldman-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-3	5-15	1.30-1.60	2.00-6.00	0.06-0.21	0.0-3.0	.20	.32			
	3-23	5-15	1.35-1.70	2.00-6.00	0.05-0.20	0.0-3.0	.15	.37			
	23-28	1-10	1.80-2.15	0.00-0.06	0.03-0.13	0.0-1.0	.10	.28			
	28-43	1-10	1.80-2.15	0.00-0.06	0.03-0.13	0.0-1.0	.10	.28			
	43-58	1-10	1.80-2.15	0.20-0.60	0.03-0.13	0.0-1.0	.05	.17			
	58-80	1-10	1.80-2.15	0.20-0.60	0.03-0.13	0.0-1.0	.15	.17			
141F:											
Porkies-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	3	86
	1-3	5-25	1.30-1.60	0.60-2.00	0.06-0.22	0.5-2.0	.10	.28			
	3-4	5-15	1.30-1.60	0.60-2.00	0.05-0.17	0.5-2.0	.10	.24			
	4-7	5-15	1.35-1.70	0.60-2.00	0.05-0.17	0.5-2.0	.10	.24			
	7-31	2-10	1.35-1.70	0.60-2.00	0.05-0.13	0.0-1.0	.10	.24			
	31-40	2-10	1.35-1.70	0.60-2.00	0.05-0.13	0.0-1.0	.10	.24			
	40-50	1-10	1.40-1.70	0.60-2.00	0.06-0.17	0.0-1.0	.10	.24			
	50-61	1-10	1.80-2.00	0.00-0.06	0.01-0.03	0.0-1.0	.10	.17			
	61-90	0-10	1.60-2.00	0.60-6.00	0.02-0.11	0.0-1.0	.05	.17			
214B:											
Amnicon-----	0-2	25-60	1.20-1.40	0.60-2.00	0.12-0.14	1.0-10.0	.28	.28	4	5	56
	2-5	25-60	1.30-1.40	0.06-0.20	0.12-0.14	1.0-10.0	.43	.43			
	5-10	25-60	1.30-1.45	0.06-0.20	0.12-0.14	3.0-10.0	.43	.43			
	10-16	35-70	1.35-1.50	0.00-0.06	0.09-0.11	5.0-15.0	.32	.32			
	16-24	60-85	1.35-1.50	0.00-0.06	0.09-0.11	5.0-15.0	.28	.28			
	24-43	60-85	1.35-1.50	0.00-0.06	0.09-0.11	5.0-15.0	.28	.28			
	43-80	60-85	1.35-1.50	0.00-0.06	0.08-0.10	5.0-15.0	.28	.28			
Bergland-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	3	4	86
	1-3	55-90	0.90-1.20	0.06-0.20	0.11-0.13	6.0-14.0	.28	.28			
	3-8	55-90	1.00-1.40	0.00-0.06	0.10-0.12	6.0-14.0	.28	.28			
	8-13	55-90	1.10-1.40	0.00-0.06	0.09-0.11	6.0-14.0	.28	.28			
	13-25	55-90	1.10-1.40	0.00-0.06	0.09-0.11	6.0-14.0	.28	.28			
	25-35	55-90	1.30-1.50	0.00-0.06	0.08-0.10	5.0-14.0	.28	.28			
	35-48	55-90	1.30-1.50	0.00-0.06	0.08-0.10	5.0-14.0	.28	.28			
	48-80	50-90	1.30-1.50	0.00-0.06	0.10-0.12	5.0-14.0	.28	.28			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
216B: Amnicon-----	0-2	25-60	1.20-1.40	0.60-2.00	0.12-0.14	1.0-10.0	.28	.28	4	5	56
	2-5	25-60	1.30-1.40	0.06-0.20	0.12-0.14	1.0-10.0	.43	.43			
	5-10	25-60	1.30-1.45	0.06-0.20	0.12-0.14	3.0-10.0	.43	.43			
	10-16	35-70	1.35-1.50	0.00-0.06	0.09-0.11	5.0-15.0	.32	.32			
	16-24	60-85	1.35-1.50	0.00-0.06	0.09-0.11	5.0-15.0	.28	.28			
	24-43	60-85	1.35-1.50	0.00-0.06	0.09-0.11	5.0-15.0	.28	.28			
	43-80	60-85	1.35-1.50	0.00-0.06	0.08-0.10	5.0-15.0	.28	.28			
217A: Cuttre-----	0-3	5-25	1.20-1.40	0.06-0.60	0.11-0.22	1.0-10.0	.28	.28	5	4	86
	3-6	25-60	1.30-1.50	0.06-0.20	0.11-0.20	3.0-10.0	.37	.37			
	6-12	35-70	1.35-1.50	0.00-0.20	0.09-0.18	5.0-15.0	.28	.28			
	12-25	60-85	1.35-1.55	0.00-0.06	0.08-0.10	6.0-9.0	.28	.28			
	25-41	60-85	1.35-1.50	0.00-0.06	0.08-0.10	6.0-9.0	.28	.28			
	41-80	60-80	1.35-1.50	0.00-0.06	0.08-0.10	6.0-9.0	.28	.28			
218: Bergland-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	3	4	86
	1-3	55-90	0.90-1.20	0.06-0.20	0.11-0.13	6.0-14.0	.28	.28			
	3-8	55-90	1.00-1.40	0.00-0.06	0.10-0.12	6.0-14.0	.28	.28			
	8-13	55-90	1.10-1.40	0.00-0.06	0.09-0.11	6.0-14.0	.28	.28			
	13-25	55-90	1.10-1.40	0.00-0.06	0.09-0.11	6.0-14.0	.28	.28			
	25-35	55-90	1.30-1.50	0.00-0.06	0.08-0.10	5.0-14.0	.28	.28			
	35-48	55-90	1.30-1.50	0.00-0.06	0.08-0.10	5.0-14.0	.28	.28			
	48-80	50-90	1.30-1.50	0.00-0.06	0.10-0.12	5.0-14.0	.28	.28			
219B: Payseor-----	0-7	35-85	1.20-1.50	0.00-0.06	0.11-0.21	5.0-16.0	.28	.28	5	4	86
	7-10	35-85	1.20-1.55	0.00-0.06	0.11-0.21	5.0-16.0	.28	.28			
	10-18	60-90	1.20-1.45	0.00-0.06	0.09-0.11	10.0-18.0	.28	.28			
	18-25	60-90	1.20-1.45	0.00-0.06	0.09-0.11	10.0-18.0	.28	.28			
	25-37	2-40	1.50-1.75	0.60-2.00	0.09-0.15	0.0-10.0	.24	.28			
	37-45	2-40	1.50-1.75	0.60-2.00	0.09-0.15	0.0-10.0	.24	.28			
	45-80	0-15	1.55-1.75	0.60-2.00	0.07-0.10	0.0-3.0	.10	.15			
Froberg-----	0-4	35-60	1.20-1.60	0.20-0.60	0.11-0.19	3.0-7.0	.32	.32	3	7	38
	4-8	35-75	1.20-1.70	0.00-0.06	0.09-0.19	5.0-10.0	.28	.28			
	8-22	40-80	1.20-1.70	0.00-0.06	0.09-0.11	6.0-12.0	.28	.28			
	22-32	40-80	1.30-1.70	0.00-0.06	0.09-0.11	6.0-10.0	.28	.20			
	32-45	15-35	1.40-1.70	0.20-2.00	0.11-0.17	1.0-3.0	.37	.24			
	45-80	15-35	1.50-1.75	0.20-2.00	0.11-0.17	1.0-3.0	.37	.32			
222: Matchwood-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	5	6	48
	1-4	60-95	0.91-1.50	0.00-0.06	0.21-0.23	3.0-10.0	.37	.37			
	4-10	60-95	1.25-1.70	0.00-0.06	0.11-0.13	3.0-10.0	.28	.28			
	10-29	60-95	1.30-1.70	0.00-0.06	0.09-0.11	3.0-15.0	.24	.24			
	29-50	10-60	1.48-1.80	0.20-0.60	0.17-0.19	1.0-6.0	.28	.28			
	50-80	10-60	1.46-1.90	0.20-0.60	0.21-0.32	1.0-6.0	.43	.43			
225A: Cuttre-----	0-3	25-60	1.20-1.40	0.06-0.60	0.11-0.22	1.0-10.0	.28	.28	5	4	86
	3-6	25-60	1.30-1.50	0.06-0.20	0.11-0.20	3.0-10.0	.37	.37			
	6-12	35-70	1.35-1.50	0.00-0.20	0.09-0.18	5.0-15.0	.28	.28			
	12-25	60-85	1.35-1.55	0.00-0.06	0.08-0.10	6.0-9.0	.28	.28			
	25-41	60-85	1.35-1.50	0.00-0.06	0.08-0.10	6.0-9.0	.28	.28			
	41-80	60-80	1.35-1.50	0.00-0.06	0.08-0.10	6.0-9.0	.28	.28			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
225A:											
Bergland-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	3	4	86
	1-3	55-90	0.90-1.20	0.06-0.20	0.11-0.13	6.0-14.0	.28	.28			
	3-8	55-90	1.00-1.40	0.00-0.06	0.10-0.12	6.0-14.0	.28	.28			
	8-13	55-90	1.10-1.40	0.00-0.06	0.09-0.11	6.0-14.0	.28	.28			
	13-25	55-90	1.10-1.40	0.00-0.06	0.09-0.11	6.0-14.0	.28	.28			
	25-35	55-90	1.30-1.50	0.00-0.06	0.08-0.10	5.0-14.0	.28	.28			
	35-48	55-90	1.30-1.50	0.00-0.06	0.08-0.10	5.0-14.0	.28	.28			
	48-80	50-90	1.30-1.50	0.00-0.06	0.10-0.12	5.0-14.0	.28	.28			
226B:											
Froberg-----	0-4	35-60	1.20-1.60	0.20-0.60	0.11-0.19	3.0-7.0	.32	.32	3	7	38
	4-8	35-75	1.20-1.70	0.00-0.06	0.09-0.19	5.0-10.0	.28	.28			
	8-22	40-80	1.20-1.70	0.00-0.06	0.09-0.11	6.0-12.0	.28	.28			
	22-32	40-80	1.30-1.70	0.00-0.06	0.09-0.11	6.0-10.0	.28	.20			
	32-45	15-35	1.40-1.70	0.20-2.00	0.11-0.17	1.0-3.0	.37	.24			
	45-80	15-35	1.50-1.75	0.20-2.00	0.11-0.17	1.0-3.0	.37	.32			
230B:											
Moquah-----	0-5	3-10	1.10-1.35	0.60-2.00	0.20-0.22	0.0-1.0	.24	.24	4	3	86
	5-19	1-18	1.10-1.55	0.60-2.00	0.20-0.22	0.0-1.0	.28	.28			
	19-48	1-18	1.10-1.55	0.60-2.00	0.17-0.19	0.0-1.0	.20	.20			
	48-55	1-18	1.10-1.60	0.60-2.00	0.09-0.11	0.0-1.0	.17	.17			
	55-80	1-18	1.10-1.60	0.60-2.00	0.08-0.10	0.0-1.0	.17	.17			
Arnheim-----	0-5	3-18	1.15-1.60	0.60-2.00	0.12-0.35	0.0-1.0	.37	.37	5	8	56
	5-10	3-18	1.50-1.80	0.60-2.00	0.09-0.22	0.0-1.0	.43	.43			
	10-80	3-18	1.46-1.80	0.60-2.00	0.08-0.22	0.0-1.0	.24	.24			
231:											
Matchwood-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	5	6	48
	1-4	60-95	0.91-1.50	0.00-0.06	0.21-0.23	3.0-10.0	.37	.37			
	4-10	60-95	1.25-1.70	0.00-0.06	0.11-0.13	3.0-10.0	.28	.28			
	10-29	60-95	1.30-1.70	0.00-0.06	0.09-0.11	3.0-15.0	.24	.24			
	29-50	10-60	1.48-1.80	0.20-0.60	0.17-0.19	1.0-6.0	.28	.28			
	50-80	10-60	1.46-1.90	0.20-0.60	0.21-0.32	1.0-6.0	.43	.43			
Dorval-----	0-4	---	0.20-0.30	0.60-6.00	0.35-0.45	---	---	---	5	8	0
	4-14	---	0.20-0.30	0.60-6.00	0.35-0.45	---	---	---			
	14-32	---	0.20-0.30	0.60-6.00	0.35-0.45	---	---	---			
	32-44	35-80	1.50-1.75	0.00-0.06	0.18-0.20	3.0-6.0	.43	.43			
	44-50	20-80	1.50-1.75	0.00-0.06	0.18-0.20	1.0-6.0	.43	.43			
	50-80	0-18	1.50-1.75	0.06-0.20	0.07-0.09	0.0-3.0	.28	.15			
233:											
Schaat Creek----	0-5	10-35	0.91-1.50	0.20-0.60	0.22-0.24	0.0-3.0	.37	.37	5	6	48
	5-10	10-35	1.40-1.70	0.00-0.06	0.18-0.22	3.0-6.0	.43	.43			
	10-19	27-38	1.40-1.70	0.00-0.06	0.18-0.22	3.0-6.0	.43	.43			
	19-43	20-38	1.40-1.70	0.00-0.06	0.15-0.22	0.0-6.0	.43	.43			
	43-54	20-38	1.40-1.70	0.00-0.06	0.13-0.22	3.0-6.0	.32	.32			
	54-80	10-35	1.50-1.75	0.00-0.06	0.17-0.22	0.0-3.0	.37	.37			
239D:											
Miskoaki-----	0-4	25-60	1.20-1.40	0.20-0.60	0.12-0.24	1.0-10.0	.28	.28	5	4	86
	4-10	25-60	1.30-1.50	0.60-2.00	0.12-0.24	1.0-10.0	.43	.43			
	10-25	60-85	1.35-1.50	0.00-0.06	0.09-0.11	5.0-15.0	.28	.28			
	25-53	60-85	1.35-1.50	0.00-0.06	0.08-0.10	5.0-15.0	.28	.28			
	53-80	60-85	1.35-1.50	0.00-0.06	0.08-0.10	5.0-15.0	.28	.28			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
277B:											
Kellogg-----	0-6	0-5	1.35-1.65	6.00-20.00	0.10-0.12	---	.17	.17	4	3	86
	6-9	0-5	1.35-1.65	6.00-20.00	0.10-0.12	---	.17	.17			
	9-24	0-5	1.30-1.70	6.00-20.00	0.06-0.08	---	.15	.15			
	24-31	5-20	1.50-1.67	0.06-0.20	0.12-0.14	0.0-1.0	.28	.28			
	31-37	35-60	1.50-1.67	0.00-0.20	0.18-0.20	0.5-10.0	.43	.43			
	37-59	35-60	1.60-1.75	0.00-0.20	0.18-0.20	0.5-10.0	.43	.43			
	59-80	0-5	1.60-1.80	6.00-20.00	0.03-0.05	---	.10	.15			
Allendale-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	3	86
	1-2	0-12	1.35-1.65	6.00-20.00	0.16-0.18	---	.24	.24			
	2-6	0-15	1.35-1.65	6.00-20.00	0.16-0.18	---	.24	.24			
	6-15	0-9	1.40-1.75	6.00-20.00	0.07-0.09	---	.15	.15			
	15-23	0-9	1.40-1.70	6.00-20.00	0.07-0.09	---	.15	.15			
	23-24	0-15	1.30-1.70	6.00-20.00	0.15-0.17	---	.24	.24			
	24-35	35-55	1.40-1.65	0.00-0.06	0.21-0.23	3.0-6.0	.43	.43			
	35-80	35-55	1.40-1.65	0.00-0.06	0.21-0.23	3.0-6.0	.43	.43			
280B:											
Flintsteel-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	5	56
	1-5	1-20	1.30-1.55	0.60-2.00	0.14-0.24	1.0-3.0	.32	.32			
	5-9	5-10	1.45-1.80	0.60-2.00	0.14-0.24	1.0-2.0	.32	.32			
	9-12	9-24	1.45-1.90	0.20-0.60	0.14-0.24	1.0-3.0	.24	.28			
	12-16	10-24	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	16-22	10-27	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	22-36	15-28	1.60-1.85	0.20-0.60	0.14-0.20	1.0-3.0	.32	.43			
	36-48	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.32	.43			
	48-80	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.43	.43			
280C:											
Flintsteel-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	5	56
	1-5	1-20	1.30-1.55	0.60-2.00	0.14-0.24	1.0-3.0	.32	.32			
	5-9	5-10	1.45-1.80	0.60-2.00	0.14-0.24	1.0-2.0	.32	.32			
	9-12	9-24	1.45-1.90	0.20-0.60	0.14-0.24	1.0-3.0	.24	.28			
	12-16	10-24	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	16-22	10-27	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	22-36	15-28	1.60-1.85	0.20-0.60	0.14-0.20	1.0-3.0	.32	.43			
	36-48	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.32	.43			
	48-80	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.43	.43			
282B:											
Big Iron-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	5	56
	1-3	5-12	1.25-1.60	0.60-2.00	0.20-0.24	0.5-2.0	.37	.37			
	3-4	5-12	1.45-1.70	0.60-2.00	0.20-0.24	0.5-2.0	.43	.43			
	4-11	7-20	1.25-1.60	0.60-2.00	0.20-0.26	0.5-2.0	.37	.37			
	11-17	7-20	1.70-1.90	0.20-0.60	0.10-0.17	0.5-2.0	.37	.37			
	17-47	5-35	1.70-1.90	0.20-0.60	0.10-0.17	1.0-3.0	.37	.43			
	47-66	7-35	1.70-1.90	0.00-0.06	0.10-0.17	0.1-2.0	.32	.37			
	66-80	2-35	1.70-1.90	0.00-0.06	0.14-0.19	1.0-2.0	.20	.43			
Flintsteel-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	5	56
	1-5	1-20	1.30-1.55	0.60-2.00	0.14-0.24	1.0-3.0	.32	.32			
	5-9	5-10	1.45-1.80	0.60-2.00	0.14-0.24	1.0-2.0	.32	.32			
	9-12	9-24	1.45-1.90	0.20-0.60	0.14-0.24	1.0-3.0	.24	.28			
	12-16	10-24	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	16-22	10-27	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	22-36	15-28	1.60-1.85	0.20-0.60	0.14-0.20	1.0-3.0	.32	.43			
	36-48	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.32	.43			
	48-80	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.43	.43			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
283B:											
Loggerhead-----	0-4	2-25	1.30-1.60	0.60-2.00	0.17-0.22	0.0-3.0	.28	.32	5	3	86
	4-5	2-25	1.40-1.70	0.60-2.00	0.14-0.18	0.0-3.0	.20	.24			
	5-15	2-25	1.50-1.80	0.60-2.00	0.15-0.19	0.0-3.0	.28	.32			
	15-38	2-25	1.60-1.80	0.60-2.00	0.13-0.17	0.0-3.0	.20	.24			
	38-56	5-25	1.60-1.90	0.20-0.60	0.14-0.17	0.0-3.0	.20	.24			
	56-80	10-35	1.60-1.90	0.20-0.60	0.16-0.19	0.0-3.0	.32	.32			
Noseum-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-4	1-15	1.35-1.65	2.00-6.00	0.15-0.18	0.0-1.0	.24	.24			
	4-6	1-15	1.30-1.70	2.00-6.00	0.14-0.17	0.0-1.0	.24	.24			
	6-14	1-15	1.30-1.70	2.00-6.00	0.14-0.17	0.0-1.0	.24	.24			
	14-24	0-10	1.30-1.70	6.00-20.00	0.14-0.17	0.0-1.0	.17	.17			
	24-37	0-5	1.30-1.70	6.00-20.00	0.05-0.07	---	.15	.15			
	37-63	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.15	.15			
	63-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.15	.15			
Ubly-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	3	86
	1-4	1-15	1.10-1.50	2.00-6.00	0.12-0.18	0.0-1.0	.24	.24			
	4-10	1-15	1.30-1.65	2.00-6.00	0.09-0.18	0.0-1.0	.28	.28			
	10-12	1-15	1.30-1.70	2.00-6.00	0.12-0.22	0.0-1.0	.28	.28			
	12-18	1-15	1.35-1.70	2.00-6.00	0.08-0.17	0.0-1.0	.28	.28			
	18-29	5-25	1.60-1.90	0.20-0.60	0.11-0.20	1.0-3.0	.37	.37			
	29-44	10-30	1.60-1.90	0.20-0.60	0.16-0.20	1.0-3.0	.37	.37			
	44-80	10-30	1.80-2.00	0.00-0.06	0.17-0.20	1.0-3.0	.37	.37			
283C:											
Loggerhead-----	0-4	2-25	1.30-1.60	0.60-2.00	0.17-0.22	0.0-3.0	.28	.32	5	3	86
	4-5	2-25	1.40-1.70	0.60-2.00	0.14-0.18	0.0-3.0	.20	.24			
	5-15	2-25	1.50-1.80	0.60-2.00	0.15-0.19	0.0-3.0	.28	.32			
	15-38	2-25	1.60-1.80	0.60-2.00	0.13-0.17	0.0-3.0	.20	.24			
	38-56	5-25	1.60-1.90	0.20-0.60	0.14-0.17	0.0-3.0	.20	.24			
	56-80	10-35	1.60-1.90	0.20-0.60	0.16-0.19	0.0-3.0	.32	.32			
Noseum-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-4	1-15	1.35-1.65	2.00-6.00	0.15-0.18	0.0-1.0	.24	.24			
	4-6	1-15	1.30-1.70	2.00-6.00	0.14-0.17	0.0-1.0	.24	.24			
	6-14	1-15	1.30-1.70	2.00-6.00	0.14-0.17	0.0-1.0	.24	.24			
	14-24	0-10	1.30-1.70	6.00-20.00	0.14-0.17	0.0-1.0	.17	.17			
	24-37	0-5	1.30-1.70	6.00-20.00	0.05-0.07	---	.15	.15			
	37-63	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.15	.15			
	63-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.15	.15			
Ubly-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	3	86
	1-4	1-15	1.10-1.50	2.00-6.00	0.12-0.18	0.0-1.0	.24	.24			
	4-10	1-15	1.30-1.65	2.00-6.00	0.09-0.18	0.0-1.0	.28	.28			
	10-12	1-15	1.30-1.70	2.00-6.00	0.12-0.22	0.0-1.0	.28	.28			
	12-18	1-15	1.35-1.70	2.00-6.00	0.08-0.17	0.0-1.0	.28	.28			
	18-29	5-25	1.60-1.90	0.20-0.60	0.11-0.20	1.0-3.0	.37	.37			
	29-44	10-30	1.60-1.90	0.20-0.60	0.16-0.20	1.0-3.0	.37	.37			
	44-80	10-30	1.80-2.00	0.00-0.06	0.17-0.20	1.0-3.0	.37	.37			
284:											
Aquents-----	0-80	---	---	---	---	---	---	---	5	---	---
Gull Point-----	0-1	---	0.04-0.15	6.00-20.00	0.55-0.65	---	---	---	5	7	38
	1-7	15-27	0.70-1.40	0.60-2.00	0.20-0.30	3.0-8.0	.24	.24			
	7-15	15-27	1.20-1.60	0.60-2.00	0.15-0.25	3.0-8.0	.24	.24			
	15-28	15-32	1.40-1.70	0.60-2.00	0.10-0.20	3.0-8.0	.24	.24			
	28-33	15-32	1.40-1.80	0.06-0.20	0.10-0.20	3.0-8.0	.20	.24			
	33-40	15-27	1.50-1.85	0.06-0.20	0.10-0.20	1.0-3.0	.28	.32			
	40-61	15-27	1.80-1.90	0.00-0.06	0.10-0.15	1.0-3.0	.37	.43			
	61-80	15-27	1.80-1.95	0.00-0.06	0.10-0.15	1.0-3.0	.37	.43			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
285F:											
Rockland-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	5	56
	1-5	1-15	1.50-1.67	0.60-2.00	0.22-0.24	0.0-3.0	.28	.28			
	5-23	5-30	1.37-1.71	0.20-0.60	0.19-0.21	0.0-3.0	.24	.28			
	23-80	5-30	1.60-1.75	0.20-0.60	0.19-0.21	0.0-3.0	.24	.28			
Arnheim-----	0-5	3-18	1.15-1.60	0.60-2.00	0.12-0.35	0.0-1.0	.37	.37	5	8	0
	5-10	3-18	1.50-1.80	0.60-2.00	0.09-0.22	0.0-1.0	.43	.43			
	10-80	3-18	1.46-1.80	0.60-2.00	0.08-0.22	0.0-1.0	.24	.24			
286A:											
Big Iron-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	5	56
	1-3	5-12	1.25-1.60	0.60-2.00	0.20-0.24	1.0-3.0	.37	.37			
	3-4	5-12	1.45-1.70	0.60-2.00	0.20-0.24	0.5-2.0	.43	.43			
	4-11	7-20	1.25-1.60	0.60-2.00	0.20-0.26	0.5-2.0	.37	.37			
	11-17	7-20	1.70-1.90	0.20-0.60	0.10-0.17	0.5-2.0	.37	.37			
	17-47	5-35	1.70-1.90	0.20-0.60	0.10-0.17	1.0-3.0	.37	.43			
	47-66	7-35	1.70-1.90	0.00-0.06	0.10-0.17	0.1-2.0	.32	.37			
	66-80	2-35	1.70-1.90	0.00-0.06	0.14-0.19	1.0-2.0	.20	.43			
Belding-----	0-1	---	0.20-0.30	0.60-6.00	0.35-0.45	---	---	---	5	3	86
	1-4	1-18	1.30-1.40	2.00-6.00	0.14-0.18	0.0-1.0	.10	.10			
	4-9	1-18	1.35-1.45	2.00-6.00	0.14-0.18	0.0-1.0	.10	.10			
	9-14	1-18	1.45-1.70	2.00-6.00	0.13-0.17	0.0-1.0	.17	.17			
	14-19	1-18	1.50-1.70	2.00-6.00	0.13-0.17	0.0-1.0	.15	.15			
	19-22	1-18	1.50-1.70	2.00-6.00	0.06-0.17	0.0-1.0	.15	.15			
	22-34	10-40	1.55-1.75	0.20-0.60	0.16-0.22	1.0-3.0	.37	.37			
	34-36	10-40	1.55-1.75	0.00-0.06	0.15-0.22	1.0-3.0	.37	.37			
	36-80	10-40	1.55-1.75	0.00-0.06	0.15-0.22	1.0-3.0	.37	.37			
287:											
Trap Falls-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	4	5	56
	1-10	5-18	1.10-1.60	0.60-2.00	0.17-0.24	0.0-3.0	.37	.37			
	10-18	10-35	1.50-1.95	0.20-0.60	0.18-0.22	1.0-6.0	.37	.37			
	18-31	15-40	1.70-1.90	0.20-0.60	0.18-0.22	1.0-6.0	.37	.37			
	31-55	5-25	1.70-1.90	0.00-0.20	0.17-0.20	0.0-3.0	.43	.43			
	55-80	5-25	1.70-1.90	0.00-0.20	0.17-0.20	0.0-3.0	.37	.37			
Tonkey-----	0-8	7-25	1.10-1.35	0.60-2.00	0.22-0.24	0.0-3.0	.32	.32	5	7	38
	8-13	5-25	1.50-1.85	0.60-2.00	0.12-0.14	0.0-3.0	.24	.24			
	13-28	5-20	1.50-1.85	0.60-2.00	0.12-0.14	0.0-3.0	.28	.28			
	28-80	5-20	1.70-1.80	0.60-2.00	0.14-0.16	0.0-3.0	.24	.24			
289B:											
Amasa-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-4	3-20	1.30-1.60	0.60-2.00	0.18-0.19	0.0-2.0	.24	.37			
	4-7	3-20	1.35-1.70	0.60-2.00	0.21-0.23	0.0-2.0	.37	.43			
	7-23	1-15	1.35-1.70	0.60-2.00	0.16-0.18	0.0-1.0	.37	.43			
	23-28	1-15	1.35-1.70	0.60-2.00	0.14-0.15	0.0-1.0	.17	.24			
	28-41	0-5	1.55-1.65	6.00-20.00	0.05-0.06	---	.10	.15			
	41-80	0-5	1.55-1.65	6.00-20.00	0.03-0.04	---	.05	.15			
290B:											
Flintsteel-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	5	56
	1-5	25-60	1.20-1.40	0.60-2.00	0.12-0.14	1.0-10.0	.28	.28			
	5-9	5-10	1.45-1.80	0.60-2.00	0.14-0.24	1.0-2.0	.32	.32			
	9-12	9-24	1.45-1.90	0.20-0.60	0.14-0.24	1.0-3.0	.24	.28			
	12-16	10-24	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	16-22	10-27	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	22-36	15-28	1.60-1.85	0.20-0.60	0.14-0.20	1.0-3.0	.32	.43			
	36-48	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.32	.43			
	48-80	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.43	.43			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
290C:											
Flintsteel-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	5	56
	1-5	25-60	1.20-1.40	0.60-2.00	0.12-0.14	1.0-10.0	.28	.28			
	5-9	5-10	1.45-1.80	0.60-2.00	0.14-0.24	1.0-2.0	.32	.32			
	9-12	9-24	1.45-1.90	0.20-0.60	0.14-0.24	1.0-3.0	.24	.28			
	12-16	10-24	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	16-22	10-27	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	22-36	15-28	1.60-1.85	0.20-0.60	0.14-0.20	1.0-3.0	.32	.43			
	36-48	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.32	.43			
	48-80	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.43	.43			
291B:											
Kalkaska-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	2	1	220
	2-6	0-5	1.30-1.55	6.00-20.00	0.07-0.09	---	.15	.15			
	6-8	0-5	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	8-17	0-5	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	17-32	0-5	1.55-1.65	6.00-20.00	0.05-0.07	---	.15	.15			
	32-80	0-5	1.55-1.65	6.00-20.00	0.05-0.07	---	.15	.15			
291D:											
Kalkaska-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	2	1	220
	2-6	0-5	1.30-1.55	6.00-20.00	0.07-0.09	---	.15	.15			
	6-8	0-5	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	8-17	0-5	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	17-32	0-5	1.55-1.65	6.00-20.00	0.05-0.07	---	.15	.15			
	32-80	0-5	1.55-1.65	6.00-20.00	0.05-0.07	---	.15	.15			
292B:											
Manido-----	0-3	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	2	1	220
	3-9	0-10	1.30-1.55	6.00-20.00	0.07-0.09	0.0-0.5	.15	.15			
	9-11	0-10	1.40-1.65	6.00-20.00	0.06-0.09	0.0-0.5	.15	.15			
	11-17	0-10	1.40-1.65	6.00-20.00	0.06-0.09	0.0-0.5	.15	.15			
	17-37	0-10	1.40-1.65	6.00-20.00	0.06-0.09	0.0-0.5	.15	.15			
	37-60	0-10	1.40-1.65	6.00-20.00	0.06-0.09	0.0-0.5	.15	.15			
	60-80	0-10	1.55-1.65	6.00-20.00	0.05-0.10	0.0-0.5	.15	.15			
Richter-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	3	86
	1-4	2-18	1.20-1.50	0.60-2.00	0.13-0.17	0.0-3.0	.17	.17			
	4-6	2-18	1.20-1.50	0.60-2.00	0.10-0.15	0.0-3.0	.17	.17			
	6-10	2-14	1.35-1.60	0.60-2.00	0.12-0.14	0.0-3.0	.24	.24			
	10-18	0-14	1.35-1.60	0.60-2.00	0.12-0.14	0.0-3.0	.24	.24			
	18-35	0-14	1.35-1.60	0.60-2.00	0.15-0.17	0.0-3.0	.15	.15			
	35-80	0-14	1.55-1.70	0.60-2.00	0.14-0.16	0.0-3.0	.15	.15			
293A:											
Wainola-----	0-3	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	5	1	250
	3-10	0-14	1.35-1.55	6.00-20.00	0.07-0.09	0.0-3.0	.15	.15			
	10-12	0-14	1.35-1.65	6.00-20.00	0.06-0.08	0.0-3.0	.15	.15			
	12-26	0-14	1.35-1.65	6.00-20.00	0.06-0.08	0.0-3.0	.15	.15			
	26-32	0-9	1.35-1.65	6.00-20.00	0.06-0.08	0.0-3.0	.15	.15			
	32-80	0-14	1.50-1.65	6.00-20.00	0.05-0.07	0.0-3.0	.15	.15			
Trap Falls-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	4	5	56
	1-10	5-18	1.10-1.60	0.60-2.00	0.17-0.24	0.0-3.0	.37	.37			
	10-18	10-35	1.50-1.95	0.20-0.60	0.18-0.22	1.0-6.0	.37	.37			
	18-31	15-40	1.70-1.90	0.20-0.60	0.18-0.22	1.0-6.0	.37	.37			
	31-55	5-25	1.70-1.90	0.00-0.20	0.17-0.20	0.0-3.0	.43	.43			
	55-80	5-25	1.70-1.90	0.00-0.20	0.17-0.20	0.0-3.0	.37	.37			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
296B:											
Manido-----	0-3	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	2	1	220
	3-9	0-10	1.30-1.55	6.00-20.00	0.07-0.09	0.0-0.5	.15	.15			
	9-11	0-10	1.40-1.65	6.00-20.00	0.06-0.09	0.0-0.5	.15	.15			
	11-17	0-10	1.40-1.65	6.00-20.00	0.06-0.09	0.0-0.5	.15	.15			
	17-37	0-10	1.40-1.65	6.00-20.00	0.06-0.09	0.0-0.5	.15	.15			
	37-60	0-10	1.40-1.65	6.00-20.00	0.06-0.09	0.0-0.5	.15	.15			
	60-80	0-10	1.55-1.65	6.00-20.00	0.05-0.10	0.0-0.5	.15	.15			
Fence-----	0-6	2-8	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37	5	5	56
	6-7	5-20	1.35-1.55	0.60-2.00	0.18-0.22	0.0-2.9	.37	.37			
	7-13	5-20	1.50-1.65	0.60-2.00	0.16-0.22	0.0-2.9	.43	.43			
	13-15	5-20	1.50-1.65	0.60-2.00	0.16-0.22	0.0-2.9	.43	.43			
	15-20	6-20	1.50-1.65	0.60-2.00	0.16-0.22	0.0-2.9	.43	.43			
	20-35	8-20	1.50-1.65	0.60-2.00	0.18-0.22	0.0-2.9	.43	.43			
	35-80	5-20	1.50-1.65	0.20-0.60	0.18-0.22	0.0-2.9	.43	.43			
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	0-5	1.60-1.80	6.00-20.00	0.03-0.05	---	.10	.15			
296D:											
Manido-----	0-3	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	2	1	220
	3-9	0-10	1.30-1.55	6.00-20.00	0.07-0.09	0.0-0.5	.15	.15			
	9-11	0-10	1.40-1.65	6.00-20.00	0.06-0.09	0.0-0.5	.15	.15			
	11-17	0-10	1.40-1.65	6.00-20.00	0.06-0.09	0.0-0.5	.15	.15			
	17-37	0-10	1.40-1.65	6.00-20.00	0.06-0.09	0.0-0.5	.15	.15			
	37-60	0-10	1.40-1.65	6.00-20.00	0.06-0.09	0.0-0.5	.15	.15			
	60-80	0-10	1.55-1.65	6.00-20.00	0.05-0.10	0.0-0.5	.15	.15			
Sporley-----	0-6	2-8	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37	5	5	56
	6-7	0-15	1.35-1.55	0.20-0.60	0.22-0.24	0.0-3.0	.37	.37			
	7-12	0-15	1.40-1.70	0.20-0.60	0.20-0.22	0.0-3.0	.43	.43			
	12-15	0-15	1.35-1.55	0.20-0.60	0.22-0.24	0.0-3.0	.37	.37			
	15-24	1-25	1.40-1.70	0.20-0.60	0.20-0.22	0.0-3.0	.43	.43			
	24-30	15-35	1.40-1.70	0.20-0.60	0.18-0.22	0.0-3.0	.43	.43			
	30-80	0-25	1.45-1.75	0.20-0.60	0.18-0.22	0.0-3.0	.43	.43			
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	0-5	1.60-1.80	6.00-20.00	0.03-0.05	---	.10	.15			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
299B:											
Zandi-----	0-0.5	---	0.10-0.20	2.00-6.00	0.45-0.55	---	---	---	5	2	134
	0.5-4	0-14	1.30-1.60	0.60-2.00	0.10-0.12	---	.24	.24			
	4-6	0-14	1.35-1.70	0.60-2.00	0.09-0.11	---	.24	.24			
	6-34	0-18	1.35-1.70	0.60-2.00	0.13-0.15	---	.24	.24			
	34-42	0-20	1.35-1.70	0.60-2.00	0.12-0.20	---	.24	.24			
	42-57	0-14	1.35-1.70	0.60-2.00	0.10-0.18	---	.37	.37			
	57-80	0-14	1.35-1.70	0.60-2.00	0.10-0.18	---	.37	.37			
Amasa-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-4	0-28	1.30-1.60	0.60-2.00	0.18-0.19	0.0-3.0	.24	.37			
	4-7	0-28	1.35-1.70	0.60-2.00	0.21-0.23	0.0-3.0	.37	.43			
	7-23	15-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.37	.43			
	23-28	15-20	1.35-1.70	0.60-2.00	0.14-0.15	0.0-3.0	.17	.24			
	28-41	0-10	1.55-1.65	6.00-20.00	0.05-0.06	0.0-3.0	.10	.15			
	41-80	0-10	1.55-1.65	6.00-20.00	0.03-0.04	0.0-3.0	.05	.15			
Flintsteel-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	5	56
	1-5	25-60	1.20-1.40	0.60-2.00	0.12-0.14	1.0-10.0	.28	.28			
	5-9	5-10	1.45-1.80	0.60-2.00	0.14-0.24	1.0-2.0	.32	.32			
	9-12	9-24	1.45-1.90	0.20-0.60	0.14-0.24	1.0-3.0	.24	.28			
	12-16	10-24	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	16-22	10-27	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	22-36	15-28	1.60-1.85	0.20-0.60	0.14-0.20	1.0-3.0	.32	.43			
	36-48	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.32	.43			
	48-80	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.43	.43			
299C:											
Zandi-----	0-0.5	---	0.10-0.20	2.00-6.00	0.45-0.55	---	---	---	5	2	134
	0.5-4	0-14	1.30-1.60	0.60-2.00	0.10-0.12	---	.24	.24			
	4-6	0-14	1.35-1.70	0.60-2.00	0.09-0.11	---	.24	.24			
	6-34	0-18	1.35-1.70	0.60-2.00	0.13-0.15	---	.24	.24			
	34-42	0-20	1.35-1.70	0.60-2.00	0.12-0.20	---	.24	.24			
	42-57	0-14	1.35-1.70	0.60-2.00	0.10-0.18	---	.37	.37			
	57-80	0-14	1.35-1.70	0.60-2.00	0.10-0.18	---	.37	.37			
Amasa-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-4	0-28	1.30-1.60	0.60-2.00	0.18-0.19	0.0-3.0	.24	.37			
	4-7	0-28	1.35-1.70	0.60-2.00	0.21-0.23	0.0-3.0	.37	.43			
	7-23	15-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.37	.43			
	23-28	15-20	1.35-1.70	0.60-2.00	0.14-0.15	0.0-3.0	.17	.24			
	28-41	0-10	1.55-1.65	6.00-20.00	0.05-0.06	0.0-3.0	.10	.15			
	41-80	0-10	1.55-1.65	6.00-20.00	0.03-0.04	0.0-3.0	.05	.15			
Flintsteel-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	5	56
	1-5	25-60	1.20-1.40	0.60-2.00	0.12-0.14	1.0-10.0	.28	.28			
	5-9	5-10	1.45-1.80	0.60-2.00	0.14-0.24	1.0-2.0	.32	.32			
	9-12	9-24	1.45-1.90	0.20-0.60	0.14-0.24	1.0-3.0	.24	.28			
	12-16	10-24	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	16-22	10-27	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	22-36	15-28	1.60-1.85	0.20-0.60	0.14-0.20	1.0-3.0	.32	.43			
	36-48	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.32	.43			
	48-80	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.43	.43			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
301A: Moodig-----	0-4	7-27	1.20-1.50	0.60-2.00	0.19-0.21	0.0-3.0	.28	.32	5	5	56
	4-9	0-27	1.20-1.50	0.60-2.00	0.15-0.16	0.0-3.0	.20	.24			
	9-11	0-27	1.35-1.60	0.60-2.00	0.19-0.21	0.0-3.0	.32	.32			
	11-18	0-28	1.35-1.60	0.60-2.00	0.14-0.16	0.0-3.0	.20	.24			
	18-25	0-27	1.35-1.60	0.60-2.00	0.14-0.16	0.0-3.0	.20	.24			
	25-30	0-27	1.35-1.60	0.60-2.00	0.12-0.13	0.0-3.0	.24	.28			
	30-35	0-20	1.35-1.60	0.60-2.00	0.11-0.13	0.0-3.0	.24	.28			
	35-47	0-27	1.35-1.60	0.60-2.00	0.14-0.16	0.0-3.0	.20	.32			
	47-57	0-20	1.55-1.70	0.60-2.00	0.09-0.11	0.0-3.0	.20	.28			
	57-63	0-27	1.55-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.28	.32			
	63-71	0-20	1.55-1.70	0.60-2.00	0.07-0.09	0.0-3.0	.15	.17			
302B: Manitowish-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	4	3	86
	1-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---			
	2-4	0-10	1.35-1.65	0.60-2.00	0.13-0.15	0.0-3.0	.17	.24			
	4-5	0-18	1.30-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.17	.24			
	5-11	0-18	1.30-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.17	.24			
	11-22	0-18	1.30-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.17	.24			
	22-40	0-14	1.55-1.75	2.00-6.00	0.06-0.08	0.0-3.0	.10	.17			
	40-80	0-8	1.55-1.75	6.00-20.00	0.04-0.06	---	.10	.15			
302C: Manitowish-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	4	3	86
	1-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---			
	2-4	0-10	1.35-1.65	0.60-2.00	0.13-0.15	0.0-3.0	.17	.24			
	4-5	0-18	1.30-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.17	.24			
	5-11	0-18	1.30-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.17	.24			
	11-22	0-18	1.30-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.17	.24			
	22-40	0-14	1.55-1.75	2.00-6.00	0.06-0.08	0.0-3.0	.10	.17			
	40-80	0-8	1.55-1.75	6.00-20.00	0.04-0.06	---	.10	.15			
303: Bowstring-----	0-13	---	0.15-0.40	0.20-6.00	0.35-0.45	---	.02	.02	5	2	0
	13-15	0-27	0.20-0.30	0.60-2.00	0.35-0.45	---	.43	.43			
	15-32	---	0.20-0.30	0.20-6.00	0.35-0.45	---	.02	.02			
	32-36	---	0.10-0.20	0.60-6.00	0.45-0.55	---	.02	.02			
	36-42	0-20	1.46-1.80	2.00-6.00	0.14-0.16	0.0-3.0	.28	.28			
	42-80	0-15	1.46-1.80	6.00-20.00	0.02-0.03	0.0-3.0	.05	.10			
Arnheim-----	0-5	3-18	1.15-1.60	0.60-2.00	0.12-0.35	0.0-1.0	.37	.37	5	8	0
	5-10	3-18	1.50-1.80	0.60-2.00	0.09-0.22	0.0-1.0	.43	.43			
	10-80	3-18	1.46-1.80	0.60-2.00	0.08-0.22	0.0-1.0	.24	.24			
305B: Keweenaw-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	5	2	134
	2-4	0-10	1.35-1.65	0.60-2.00	0.05-0.12	---	.10	.17			
	4-6	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	6-25	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	25-45	0-10	1.30-1.80	0.60-2.00	0.03-0.10	---	.15	.15			
	45-56	0-10	1.30-1.80	0.60-2.00	0.05-0.08	---	.15	.15			
	56-71	0-10	1.30-1.80	0.60-2.00	0.03-0.07	---	.15	.15			
	71-90	0-10	1.55-1.80	0.60-2.00	0.05-0.16	---	.20	.24			
Siskiwit-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	5	2	134
	2-8	0-18	1.35-1.55	0.60-2.00	0.09-0.12	0.0-3.0	.17	.17			
	8-11	0-14	1.35-1.65	0.60-2.00	0.15-0.22	0.0-3.0	.17	.17			
	11-28	0-14	1.30-1.70	0.60-2.00	0.15-0.22	0.0-3.0	.17	.17			
	28-34	0-14	1.35-1.65	0.60-2.00	0.08-0.11	---	.17	.17			
	34-55	0-14	1.35-1.65	0.60-2.00	0.14-0.18	---	.17	.17			
	55-80	0-10	1.50-1.65	2.00-6.00	0.01-0.06	---	.15	.15			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
305C:											
Keweenaw-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	5	2	134
	2-4	0-10	1.35-1.65	0.60-2.00	0.05-0.12	---	.10	.17			
	4-6	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	6-25	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	25-45	0-10	1.30-1.80	0.60-2.00	0.03-0.10	---	.15	.15			
	45-56	0-10	1.30-1.80	0.60-2.00	0.05-0.08	---	.15	.15			
	56-71	0-10	1.30-1.80	0.60-2.00	0.03-0.07	---	.15	.15			
	71-90	0-10	1.55-1.80	0.60-2.00	0.05-0.16	---	.20	.24			
Siskiwit-----											
Siskiwit-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	5	2	134
	2-8	0-18	1.35-1.55	0.60-2.00	0.09-0.12	0.0-3.0	.17	.17			
	8-11	0-14	1.35-1.65	0.60-2.00	0.15-0.22	0.0-3.0	.17	.17			
	11-28	0-14	1.30-1.70	0.60-2.00	0.15-0.22	0.0-3.0	.17	.17			
	28-34	0-14	1.35-1.65	0.60-2.00	0.08-0.11	---	.17	.17			
	34-55	0-14	1.35-1.65	0.60-2.00	0.14-0.18	---	.17	.17			
	55-80	0-10	1.50-1.65	2.00-6.00	0.01-0.06	---	.15	.15			
307:											
Lupton-----	0-20	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	5	2	134
	20-80	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
Cathro-----											
Cathro-----	0-6	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	5	8	0
	6-31	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	31-80	5-30	1.70-1.80	0.60-2.00	0.10-0.22	0.0-3.0	.20	.28			
309:											
Cathro-----	0-6	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	2	8	0
	6-31	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	31-80	5-30	1.70-1.80	0.20-2.00	0.10-0.22	0.0-3.0	.20	.28			
310B:											
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
310C:											
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
310D: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
310E: Schweitzer-----	0-1	2-20	1.30-1.60	0.60-2.00	0.13-0.24	0.0-3.0	.24	.32	4	8	0
	1-5	2-20	1.30-1.60	0.60-2.00	0.13-0.24	0.0-3.0	.20	.37			
	5-8	2-20	1.35-1.70	0.60-2.00	0.13-0.24	0.0-3.0	.15	.28			
	8-21	2-20	1.35-1.70	0.60-2.00	0.13-0.24	0.0-3.0	.15	.28			
	21-27	0-15	1.80-2.10	0.00-0.06	0.01-0.03	0.0-1.0	.02	.17			
	27-43	0-15	1.80-2.10	0.00-0.06	0.01-0.03	0.0-1.0	.02	.17			
	43-61	0-15	1.60-1.80	0.60-2.00	0.02-0.04	0.0-1.0	.15	.28			
	61-80	0-15	1.60-1.80	0.60-2.00	0.02-0.04	0.0-3.0	.02	.17			
311B: Tula-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-5	2-18	1.20-1.50	0.60-2.00	0.10-0.20	0.0-3.0	.15	.28			
	5-8	2-18	1.20-1.50	0.60-2.00	0.10-0.20	0.0-3.0	.15	.28			
	8-20	2-18	1.35-1.60	0.60-2.00	0.10-0.18	0.0-3.0	.15	.28			
	20-28	2-18	1.35-1.60	0.60-2.00	0.08-0.15	0.0-3.0	.15	.28			
	28-37	2-18	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.15	.28			
	37-62	2-20	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.24	.37			
	62-80	2-18	1.55-1.70	0.60-2.00	0.07-0.14	0.0-3.0	.15	.15			
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
312A: Tula-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-5	2-18	1.20-1.50	0.60-2.00	0.10-0.20	0.0-3.0	.15	.28			
	5-8	2-18	1.20-1.50	0.60-2.00	0.10-0.20	0.0-3.0	.15	.28			
	8-20	2-18	1.35-1.60	0.60-2.00	0.10-0.18	0.0-3.0	.15	.28			
	20-28	2-18	1.35-1.60	0.60-2.00	0.08-0.15	0.0-3.0	.15	.28			
	28-37	2-18	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.15	.28			
	37-62	2-20	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.24	.37			
	62-80	2-18	1.55-1.70	0.60-2.00	0.07-0.14	0.0-3.0	.15	.15			
Foxpaw-----	0-1	---	0.05-0.15	0.20-6.00	0.05-0.15	---	---	---	5	5	56
	1-3	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	3-8	5-20	1.10-1.35	0.60-2.00	0.17-0.19	0.0-3.0	.24	.32			
	8-15	2-20	1.50-1.85	0.60-2.00	0.13-0.15	0.0-3.0	.17	.24			
	15-23	1-20	1.50-1.85	0.60-2.00	0.13-0.15	0.0-3.0	.17	.24			
	23-32	1-20	1.50-1.85	0.60-2.00	0.10-0.13	0.0-3.0	.17	.24			
	32-80	1-20	1.70-1.80	0.60-2.00	0.11-0.13	0.0-3.0	.20	.24			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
312A: Gay-----	0-4	---	0.20-0.30	0.60-6.00	0.35-0.45	---	---	---	5	3	86
	4-7	2-10	1.10-1.50	0.60-2.00	0.07-0.18	0.0-2.9	.24	.24			
	7-11	2-10	1.10-1.60	0.60-2.00	0.07-0.15	0.0-2.9	.24	.24			
	11-16	6-18	1.50-1.85	0.60-2.00	0.10-0.18	0.0-2.9	.28	.28			
	16-30	6-15	1.70-1.80	0.60-2.00	0.09-0.13	0.0-2.9	.28	.28			
	30-80	6-12	1.70-1.80	0.60-2.00	0.09-0.13	0.0-2.9	.28	.28			
316: Gay-----	0-7	4-20	1.35-1.55	0.60-2.00	0.49-0.54	0.0-3.0	.28	.32	5	3	86
	7-11	2-10	1.10-1.60	0.60-2.00	0.07-0.15	0.0-2.9	.24	.24			
	11-16	6-18	1.50-1.85	0.60-2.00	0.10-0.18	0.0-2.9	.28	.28			
	16-30	6-15	1.70-1.80	0.60-2.00	0.09-0.13	0.0-2.9	.28	.28			
	30-80	6-12	1.70-1.80	0.60-2.00	0.09-0.13	0.0-2.9	.28	.28			
317B: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
317C: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
317D: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
319B: McMillan-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-2	0-10	1.35-1.55	0.60-2.00	0.13-0.15	0.0-1.0	.24	.24			
	2-5	0-10	1.35-1.55	0.60-2.00	0.22-0.24	0.0-1.0	.24	.24			
	5-9	0-10	1.40-1.70	0.60-2.00	0.16-0.18	0.0-1.0	.24	.24			
	9-14	0-10	1.40-1.70	0.60-2.00	0.09-0.11	0.0-1.0	.24	.24			
	14-19	0-10	1.40-1.70	6.00-20.00	0.06-0.08	0.0-1.0	.24	.24			
	19-29	0-5	1.35-1.55	6.00-20.00	0.02-0.04	0.0-0.5	.15	.15			
	29-72	0-5	1.35-1.55	6.00-20.00	0.02-0.04	0.0-0.5	.15	.15			
	72-80	0-2	1.45-1.75	6.00-20.00	0.02-0.03	---	.10	.10			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
319B:											
Noseum-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-4	1-15	1.35-1.65	2.00-6.00	0.15-0.18	0.0-1.0	.24	.24			
	4-6	1-15	1.30-1.70	2.00-6.00	0.14-0.17	0.0-1.0	.24	.24			
	6-14	1-15	1.30-1.70	2.00-6.00	0.14-0.17	0.0-1.0	.24	.24			
	14-24	0-10	1.30-1.70	6.00-20.00	0.14-0.17	0.0-1.0	.17	.17			
	24-37	0-5	1.30-1.70	6.00-20.00	0.05-0.07	---	.15	.15			
	37-63	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.15	.15			
	63-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.15	.15			
319C:											
McMillan-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-2	0-10	1.35-1.55	0.60-2.00	0.13-0.15	0.0-1.0	.24	.24			
	2-5	0-10	1.35-1.55	0.60-2.00	0.22-0.24	0.0-1.0	.24	.24			
	5-9	0-10	1.40-1.70	0.60-2.00	0.16-0.18	0.0-1.0	.24	.24			
	9-14	0-10	1.40-1.70	0.60-2.00	0.09-0.11	0.0-1.0	.24	.24			
	14-19	0-10	1.40-1.70	6.00-20.00	0.06-0.08	0.0-1.0	.24	.24			
	19-29	0-5	1.35-1.55	6.00-20.00	0.02-0.04	0.0-0.5	.15	.15			
	29-72	0-5	1.35-1.55	6.00-20.00	0.02-0.04	0.0-0.5	.15	.15			
Islandlake-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	2	1	220
	2-7	0-10	1.30-1.55	6.00-20.00	0.07-0.09	0.0-1.0	.15	.15			
	7-9	0-12	1.40-1.65	6.00-20.00	0.06-0.08	0.0-1.0	.15	.15			
	9-35	0-8	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	35-45	0-10	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	45-80	0-10	1.55-1.65	6.00-20.00	0.05-0.07	0.0-1.0	.15	.15			
319D:											
McMillan-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-2	0-10	1.35-1.55	0.60-2.00	0.13-0.15	0.0-1.0	.24	.24			
	2-5	0-10	1.35-1.55	0.60-2.00	0.22-0.24	0.0-1.0	.24	.24			
	5-9	0-10	1.40-1.70	0.60-2.00	0.16-0.18	0.0-1.0	.24	.24			
	9-14	0-10	1.40-1.70	0.60-2.00	0.09-0.11	0.0-1.0	.24	.24			
	14-19	0-10	1.40-1.70	6.00-20.00	0.06-0.08	0.0-1.0	.24	.24			
	19-29	0-5	1.35-1.55	6.00-20.00	0.02-0.04	0.0-0.5	.15	.15			
	29-72	0-5	1.35-1.55	6.00-20.00	0.02-0.04	0.0-0.5	.15	.15			
Islandlake-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	2	1	220
	2-7	0-10	1.30-1.55	6.00-20.00	0.07-0.09	0.0-1.0	.15	.15			
	7-9	0-12	1.40-1.65	6.00-20.00	0.06-0.08	0.0-1.0	.15	.15			
	9-35	0-8	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	35-45	0-10	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	45-80	0-10	1.55-1.65	6.00-20.00	0.05-0.07	0.0-1.0	.15	.15			
319E:											
McMillan-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-2	0-10	1.35-1.55	0.60-2.00	0.13-0.15	0.0-1.0	.24	.24			
	2-5	0-10	1.35-1.55	0.60-2.00	0.22-0.24	0.0-1.0	.24	.24			
	5-9	0-10	1.40-1.70	0.60-2.00	0.16-0.18	0.0-1.0	.24	.24			
	9-14	0-10	1.40-1.70	0.60-2.00	0.09-0.11	0.0-1.0	.24	.24			
	14-19	0-10	1.40-1.70	6.00-20.00	0.06-0.08	0.0-1.0	.24	.24			
	19-29	0-5	1.35-1.55	6.00-20.00	0.02-0.04	0.0-0.5	.15	.15			
	29-72	0-5	1.35-1.55	6.00-20.00	0.02-0.04	0.0-0.5	.15	.15			
Islandlake-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	2	1	220
	2-7	0-10	1.30-1.55	6.00-20.00	0.07-0.09	0.0-3.0	.15	.15			
	7-9	0-12	1.40-1.65	6.00-20.00	0.06-0.08	0.0-3.0	.15	.15			
	9-35	0-8	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	35-45	0-10	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	45-80	0-10	1.55-1.65	6.00-20.00	0.05-0.07	0.0-3.0	.15	.15			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
322B:											
Stutts-----	0-1	---	0.10-0.20	0.20-6.00	0.45-0.55	---	---	---	3	2	134
	1-6	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	6-8	0-15	1.35-1.70	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	8-15	0-15	1.30-1.70	2.00-6.00	0.06-0.08	0.0-1.0	.17	.17			
	15-18	0-10	1.30-1.70	2.00-6.00	0.06-0.08	0.0-1.0	.15	.15			
	18-28	0-4	1.30-1.70	6.00-20.00	0.06-0.08	---	.15	.15			
	28-80	0-4	1.55-1.75	6.00-20.00	0.05-0.07	---	.15	.15			
Keweenaw-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	5	2	134
	2-4	0-10	1.35-1.65	0.60-2.00	0.05-0.12	---	.10	.17			
	4-6	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	6-25	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	25-45	0-10	1.30-1.80	0.60-2.00	0.03-0.10	---	.15	.15			
	45-56	0-10	1.30-1.80	0.60-2.00	0.05-0.08	---	.15	.15			
	56-71	0-10	1.30-1.80	0.60-2.00	0.03-0.07	---	.15	.15			
	71-90	0-10	1.55-1.80	0.60-2.00	0.05-0.16	---	.20	.24			
322C:											
Stutts-----	0-1	---	0.10-0.20	0.20-6.00	0.45-0.55	---	---	---	3	2	134
	1-6	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	6-8	0-15	1.35-1.70	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	8-15	0-15	1.30-1.70	2.00-6.00	0.06-0.08	0.0-1.0	.17	.17			
	15-18	0-10	1.30-1.70	2.00-6.00	0.06-0.08	0.0-1.0	.15	.15			
	18-28	0-4	1.30-1.70	6.00-20.00	0.06-0.08	---	.15	.15			
	28-80	0-4	1.55-1.75	6.00-20.00	0.05-0.07	---	.15	.15			
Keweenaw-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	5	2	134
	2-4	0-10	1.35-1.65	0.60-2.00	0.05-0.12	---	.10	.17			
	4-6	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	6-25	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	25-45	0-10	1.30-1.80	0.60-2.00	0.03-0.10	---	.15	.15			
	45-56	0-10	1.30-1.80	0.60-2.00	0.05-0.08	---	.15	.15			
	56-71	0-10	1.30-1.80	0.60-2.00	0.03-0.07	---	.15	.15			
	71-90	0-10	1.55-1.80	0.60-2.00	0.05-0.16	---	.20	.24			
322D:											
Stutts-----	0-1	---	0.10-0.20	0.20-6.00	0.45-0.55	---	---	---	3	2	134
	1-6	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	6-8	0-15	1.35-1.70	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	8-15	0-15	1.30-1.70	2.00-6.00	0.06-0.08	0.0-1.0	.17	.17			
	15-18	0-10	1.30-1.70	2.00-6.00	0.06-0.08	0.0-1.0	.15	.15			
	18-28	0-4	1.30-1.70	6.00-20.00	0.06-0.08	---	.15	.15			
	28-80	0-4	1.55-1.75	6.00-20.00	0.05-0.07	---	.15	.15			
Keweenaw-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	5	2	134
	2-4	0-10	1.35-1.65	0.60-2.00	0.05-0.12	---	.10	.17			
	4-6	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	6-25	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	25-45	0-10	1.30-1.80	0.60-2.00	0.03-0.10	---	.15	.15			
	45-56	0-10	1.30-1.80	0.60-2.00	0.05-0.08	---	.15	.15			
	56-71	0-10	1.30-1.80	0.60-2.00	0.03-0.07	---	.15	.15			
	71-90	0-10	1.55-1.80	0.60-2.00	0.05-0.16	---	.20	.24			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
323B:											
Keweenaw-----	0-2	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	5	2	134
	2-4	0-57	1.45-1.65	0.60-6.00	0.09-0.13	0.0-2.9	.17	.17			
	4-6	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	6-25	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	25-45	0-10	1.30-1.80	0.60-2.00	0.03-0.10	---	.15	.15			
	45-56	0-10	1.30-1.80	0.60-2.00	0.05-0.08	---	.15	.15			
	56-71	0-10	1.30-1.80	0.60-2.00	0.03-0.07	---	.15	.15			
	71-90	0-10	1.55-1.80	0.60-2.00	0.05-0.16	---	.20	.24			
Kalkaska-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	2	1	220
	2-6	0-5	1.30-1.55	6.00-20.00	0.07-0.09	---	.15	.15			
	6-8	0-5	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	8-17	0-5	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	17-32	0-5	1.55-1.65	6.00-20.00	0.05-0.07	---	.15	.15			
	32-80	0-5	1.55-1.65	6.00-20.00	0.05-0.07	---	.15	.15			
323C:											
Keweenaw-----	0-2	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	5	2	134
	2-4	0-57	1.45-1.65	0.60-6.00	0.09-0.13	0.0-2.9	.17	.17			
	4-6	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	6-25	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	25-45	0-10	1.30-1.80	0.60-2.00	0.03-0.10	---	.15	.15			
	45-56	0-10	1.30-1.80	0.60-2.00	0.05-0.08	---	.15	.15			
	56-71	0-10	1.30-1.80	0.60-2.00	0.03-0.07	---	.15	.15			
	71-90	0-10	1.55-1.80	0.60-2.00	0.05-0.16	---	.20	.24			
Kalkaska-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	2	1	220
	2-6	0-5	1.30-1.55	6.00-20.00	0.07-0.09	---	.15	.15			
	6-8	0-5	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	8-17	0-5	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	17-32	0-5	1.55-1.65	6.00-20.00	0.05-0.07	---	.15	.15			
	32-80	0-5	1.55-1.65	6.00-20.00	0.05-0.07	---	.15	.15			
323D:											
Keweenaw-----	0-2	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	5	2	134
	2-4	0-57	1.45-1.65	0.60-6.00	0.09-0.13	0.0-2.9	.17	.17			
	4-6	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	6-25	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	25-45	0-10	1.30-1.80	0.60-2.00	0.03-0.10	---	.15	.15			
	45-56	0-10	1.30-1.80	0.60-2.00	0.05-0.08	---	.15	.15			
	56-71	0-10	1.30-1.80	0.60-2.00	0.03-0.07	---	.15	.15			
	71-90	0-10	1.55-1.80	0.60-2.00	0.05-0.16	---	.20	.24			
Kalkaska-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	2	1	220
	2-6	0-5	1.30-1.55	6.00-20.00	0.07-0.09	---	.15	.15			
	6-8	0-5	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	8-17	0-5	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	17-32	0-5	1.55-1.65	6.00-20.00	0.05-0.07	---	.15	.15			
	32-80	0-5	1.55-1.65	6.00-20.00	0.05-0.07	---	.15	.15			
325B:											
Siskiwit-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	2	134
	2-8	0-18	1.35-1.55	0.60-2.00	0.09-0.12	0.0-3.0	.17	.17			
	8-11	0-14	1.35-1.65	0.60-2.00	0.15-0.22	0.0-3.0	.17	.17			
	11-28	0-14	1.30-1.70	0.60-2.00	0.15-0.22	0.0-3.0	.17	.17			
	28-34	0-14	1.35-1.65	0.60-2.00	0.08-0.11	---	.17	.17			
	34-55	0-14	1.35-1.65	0.60-2.00	0.14-0.18	---	.17	.17			
	55-80	0-10	1.50-1.65	2.00-6.00	0.01-0.06	---	.15	.15			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
325B:											
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	3	86
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
325C:											
Siskiwit-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	2	134
	2-8	0-18	1.35-1.55	0.60-2.00	0.09-0.12	0.0-3.0	.17	.17			
	8-11	0-14	1.35-1.65	0.60-2.00	0.15-0.22	0.0-3.0	.17	.17			
	11-28	0-14	1.30-1.70	0.60-2.00	0.15-0.22	0.0-3.0	.17	.17			
	28-34	0-14	1.35-1.65	0.60-2.00	0.08-0.11	---	.17	.17			
	34-55	0-14	1.35-1.65	0.60-2.00	0.14-0.18	---	.17	.17			
	55-80	0-10	1.50-1.65	2.00-6.00	0.01-0.06	---	.15	.15			
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	3	86
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
327:											
Foxpaw-----	0-1	---	0.05-0.15	0.20-6.00	0.05-0.15	---	---	---	5	5	56
	1-3	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	3-8	5-20	1.10-1.35	0.60-2.00	0.17-0.19	0.0-3.0	.24	.32			
	8-15	2-20	1.50-1.85	0.60-2.00	0.13-0.15	0.0-3.0	.17	.24			
	15-23	1-20	1.50-1.85	0.60-2.00	0.13-0.15	0.0-3.0	.17	.24			
	23-32	1-20	1.50-1.85	0.60-2.00	0.10-0.13	0.0-3.0	.17	.24			
	32-80	1-20	1.70-1.80	0.60-2.00	0.11-0.13	0.0-3.0	.20	.24			
Sarwet-----	0-2	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	3	86
	2-3	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---			
	3-7	1-20	1.30-1.60	0.60-6.00	0.16-0.18	0.0-3.0	.24	.24			
	7-14	1-20	1.35-1.70	0.60-6.00	0.16-0.18	0.0-3.0	.28	.28			
	14-22	1-20	1.35-1.70	0.60-6.00	0.15-0.17	0.0-3.0	.28	.28			
	22-28	1-20	1.35-1.70	0.60-6.00	0.09-0.11	0.0-3.0	.17	.17			
	28-38	1-20	1.35-1.70	0.60-6.00	0.09-0.11	0.0-3.0	.17	.17			
	38-47	0-20	1.60-1.80	0.60-6.00	0.05-0.07	0.0-3.0	.15	.15			
	47-50	1-25	1.60-1.80	0.60-6.00	0.14-0.16	0.0-3.0	.32	.37			
	50-80	0-20	1.60-1.80	0.60-6.00	0.08-0.09	0.0-3.0	.15	.17			
328B:											
Annalake-----	0-9	1-15	1.35-1.55	0.60-2.00	0.16-0.24	0.0-2.0	.24	.24	5	3	56
	9-16	0-10	1.40-1.60	0.60-2.00	0.08-0.17	0.0-1.0	.24	.24			
	16-31	0-10	1.40-1.70	0.60-2.00	0.08-0.15	0.0-1.0	.24	.24			
	31-48	0-15	1.35-1.70	0.60-2.00	0.10-0.17	0.0-2.0	.24	.24			
	48-61	0-20	1.35-1.70	0.60-2.00	0.12-0.20	0.0-2.0	.24	.24			
	61-80	0-15	1.60-1.80	0.60-2.00	0.10-0.19	0.0-2.0	.24	.24			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility	Wind erodi- bility
							K	Kf	T	group	index
	In	Pct	g/cc	In/hr	In/in	Pct					
328B: Karlin-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.18	0.0-1.0	.15	.15			
	4-15	0-10	1.30-1.70	2.00-6.00	0.12-0.17	0.0-1.0	.10	.10			
	15-29	0-5	1.40-1.70	6.00-20.00	0.06-0.11	0.0-1.0	.10	.10			
	29-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.10	.10			
328C: Annalake-----	0-9	1-15	1.35-1.55	0.60-2.00	0.16-0.24	0.0-2.0	.24	.24	5	3	56
	9-16	0-10	1.40-1.60	0.60-2.00	0.08-0.17	0.0-1.0	.24	.24			
	16-31	0-10	1.40-1.70	0.60-2.00	0.08-0.15	0.0-1.0	.24	.24			
	31-48	0-15	1.35-1.70	0.60-2.00	0.10-0.17	0.0-2.0	.24	.24			
	48-61	0-20	1.35-1.70	0.60-2.00	0.12-0.20	0.0-2.0	.24	.24			
	61-80	0-15	1.60-1.80	0.60-2.00	0.10-0.19	0.0-2.0	.24	.24			
Karlin-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.18	0.0-1.0	.15	.15			
	4-15	0-10	1.30-1.70	2.00-6.00	0.12-0.17	0.0-1.0	.10	.10			
	15-29	0-5	1.40-1.70	6.00-20.00	0.06-0.11	0.0-1.0	.10	.10			
	29-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	---	.10	.10			
328D: Karlin-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-2.9	.15	.15			
	4-15	0-18	1.30-1.70	2.00-6.00	0.12-0.19	0.0-2.9	.10	.10			
	15-29	0-10	1.40-1.70	6.00-20.00	0.06-0.11	0.0-2.9	.10	.10			
	29-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	0.0-2.9	.10	.10			
Zandi-----	0-0.5	---	0.10-0.20	2.00-6.00	0.45-0.55	---	---	---	2	2	134
	0.5-4	0-14	1.30-1.60	0.60-2.00	0.10-0.12	---	.24	.24			
	4-6	0-14	1.35-1.70	0.60-2.00	0.09-0.11	---	.24	.24			
	6-34	0-18	1.35-1.70	0.60-2.00	0.13-0.15	---	.24	.24			
	34-42	0-20	1.35-1.70	0.60-2.00	0.12-0.20	---	.24	.24			
	42-57	0-14	1.35-1.70	0.60-2.00	0.10-0.18	---	.37	.37			
	57-80	0-14	1.35-1.70	0.60-2.00	0.10-0.18	---	.37	.37			
329A: Tula-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	2-18	1.20-1.50	0.60-2.00	0.10-0.20	0.0-3.0	.15	.28			
	8-20	2-18	1.35-1.60	0.60-2.00	0.10-0.18	0.0-3.0	.15	.28			
	20-28	2-18	1.35-1.60	0.60-2.00	0.08-0.15	0.0-3.0	.15	.28			
	28-37	2-18	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.15	.28			
	37-62	2-20	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.24	.37			
	62-80	2-18	1.55-1.70	0.60-2.00	0.07-0.14	0.0-3.0	.15	.15			
351B: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
351C: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
351D: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
351E: Schweitzer-----	0-1	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37	4	8	0
	1-5	2-20	1.30-1.60	0.60-2.00	0.13-0.24	0.0-3.0	.20	.37			
	5-8	2-20	1.35-1.70	0.60-2.00	0.13-0.24	0.0-3.0	.15	.28			
	8-21	2-20	1.35-1.70	0.60-2.00	0.13-0.24	0.0-3.0	.15	.28			
	21-27	0-15	1.80-2.10	0.00-0.06	0.01-0.03	0.0-1.0	.02	.17			
	27-43	0-15	1.80-2.10	0.00-0.06	0.01-0.03	0.0-1.0	.02	.17			
	43-61	0-15	1.60-1.80	0.60-2.00	0.02-0.04	0.0-1.0	.15	.28			
	61-80	0-15	1.60-1.80	0.60-2.00	0.02-0.04	0.0-3.0	.02	.17			
351F: Schweitzer-----	0-1	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37	4	8	0
	1-5	2-20	1.30-1.60	0.60-2.00	0.13-0.24	0.0-3.0	.20	.37			
	5-8	2-20	1.35-1.70	0.60-2.00	0.13-0.24	0.0-3.0	.15	.28			
	8-21	2-20	1.35-1.70	0.60-2.00	0.13-0.24	0.0-3.0	.15	.28			
	21-27	0-15	1.80-2.10	0.00-0.06	0.01-0.03	0.0-1.0	.02	.17			
	27-43	0-15	1.80-2.10	0.00-0.06	0.01-0.03	0.0-1.0	.02	.17			
	43-61	0-15	1.60-1.80	0.60-2.00	0.02-0.04	0.0-1.0	.15	.28			
	61-80	0-15	1.60-1.80	0.60-2.00	0.02-0.04	0.0-3.0	.02	.17			
353A: Tula-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	2-18	1.20-1.50	0.60-2.00	0.10-0.20	0.0-3.0	.15	.28			
	8-20	2-18	1.35-1.60	0.60-2.00	0.10-0.18	0.0-3.0	.15	.28			
	20-28	2-18	1.35-1.60	0.60-2.00	0.08-0.15	0.0-3.0	.15	.28			
	28-37	2-18	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.15	.28			
	37-62	2-20	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.24	.37			
	62-80	2-18	1.55-1.70	0.60-2.00	0.07-0.14	0.0-3.0	.15	.15			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
354B: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
354C: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
354D: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
354E: Schweitzer-----	0-1	2-20	1.30-1.60	0.60-2.00	0.13-0.24	0.0-3.0	.24	.32	4	8	0
	1-5	2-20	1.30-1.60	0.60-2.00	0.13-0.24	0.0-3.0	.20	.37			
	5-8	2-20	1.35-1.70	0.60-2.00	0.13-0.24	0.0-3.0	.15	.28			
	8-21	2-20	1.35-1.70	0.60-2.00	0.13-0.24	0.0-3.0	.15	.28			
	21-27	0-15	1.80-2.10	0.00-0.06	0.01-0.03	0.0-1.0	.02	.17			
	27-43	0-15	1.80-2.10	0.00-0.06	0.01-0.03	0.0-1.0	.02	.17			
	43-61	0-15	1.60-1.80	0.60-2.00	0.02-0.04	0.0-1.0	.15	.28			
	61-80	0-15	1.60-1.80	0.60-2.00	0.02-0.04	0.0-3.0	.02	.17			
354F: Schweitzer-----	0-1	2-20	1.30-1.60	0.60-2.00	0.13-0.24	0.0-3.0	.24	.32	4	8	0
	1-5	2-20	1.30-1.60	0.60-2.00	0.13-0.24	0.0-3.0	.20	.37			
	5-8	2-20	1.35-1.70	0.60-2.00	0.13-0.24	0.0-3.0	.15	.28			
	8-21	2-20	1.35-1.70	0.60-2.00	0.13-0.24	0.0-3.0	.15	.28			
	21-27	0-15	1.80-2.10	0.00-0.06	0.01-0.03	0.0-1.0	.02	.17			
	27-43	0-15	1.80-2.10	0.00-0.06	0.01-0.03	0.0-1.0	.02	.17			
	43-61	0-15	1.60-1.80	0.60-2.00	0.02-0.04	0.0-1.0	.15	.28			
	61-80	0-15	1.60-1.80	0.60-2.00	0.02-0.04	0.0-3.0	.02	.17			
363C: Talus.											
Arcadian-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	2	8	0
	2-5	4-15	1.30-1.60	0.60-2.00	0.06-0.11	0.0-2.9	.17	.24			
	5-12	4-18	1.35-1.70	0.60-2.00	0.06-0.11	0.0-2.9	.17	.24			
	12-22	---	---	0.00-0.01	---	---	---	---			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
363D: Talus.											
Arcadian-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	2	8	0
	2-5	4-15	1.30-1.60	0.60-2.00	0.06-0.11	0.0-2.9	.17	.24			
	5-12	4-18	1.35-1.70	0.60-2.00	0.06-0.11	0.0-2.9	.17	.24			
	12-22	---	---	0.00-0.01	---	---	---	---			
363E: Talus.											
Arcadian-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	2	8	0
	2-5	4-15	1.30-1.60	0.60-2.00	0.06-0.11	0.0-2.9	.17	.24			
	5-12	4-18	1.35-1.70	0.60-2.00	0.06-0.11	0.0-2.9	.17	.24			
	12-22	---	---	0.00-0.01	---	---	---	---			
363F: Talus.											
Arcadian-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	2	8	0
	2-5	4-15	1.30-1.60	0.60-2.00	0.06-0.11	0.0-2.9	.17	.24			
	5-12	4-18	1.35-1.70	0.60-2.00	0.06-0.11	0.0-2.9	.17	.24			
	12-22	---	---	0.00-0.01	---	---	---	---			
364F. Talus											
365F. Rock outcrop											
369C: Dishno-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	4	86
	1-3	1-18	1.30-1.60	0.60-2.00	0.17-0.19	0.0-1.0	.20	.37			
	3-9	1-18	1.30-1.60	0.60-2.00	0.17-0.19	0.0-1.0	.20	.37			
	9-10	1-18	1.35-1.70	0.60-2.00	0.12-0.14	0.0-1.0	.20	.32			
	10-18	0-18	1.35-1.70	0.60-2.00	0.13-0.15	0.0-1.0	.17	.28			
	18-22	0-18	1.35-1.70	0.60-2.00	0.13-0.18	0.0-1.0	.10	.17			
	22-29	0-15	1.50-1.80	2.00-6.00	0.06-0.08	0.0-1.0	.05	.17			
	29-46	0-15	1.50-1.80	2.00-6.00	0.05-0.07	0.0-1.0	.05	.17			
	46-80	---	---	0.00-0.01	---	---	---	---			
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
Peshekee-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	2	5	56
	1-4	3-20	1.35-1.55	0.60-2.00	0.13-0.24	0.0-1.0	.20	.37			
	4-6	3-20	1.40-1.70	0.60-2.00	0.13-0.22	0.0-1.0	.24	.43			
	6-9	3-20	1.40-1.70	0.60-2.00	0.13-0.22	0.0-1.0	.28	.43			
	9-19	3-20	1.40-1.70	0.60-2.00	0.10-0.17	0.0-1.0	.20	.37			
	19-80	---	---	0.00-0.01	---	---	---	---			
Rock outcrop.											

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
369D:											
Dishno-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	4	86
	1-3	1-18	1.30-1.60	0.60-2.00	0.17-0.19	0.0-1.0	.20	.37			
	3-9	1-18	1.30-1.60	0.60-2.00	0.17-0.19	0.0-1.0	.20	.37			
	9-10	1-18	1.35-1.70	0.60-2.00	0.12-0.14	0.0-1.0	.20	.32			
	10-18	0-18	1.35-1.70	0.60-2.00	0.13-0.15	0.0-1.0	.17	.28			
	18-22	0-18	1.35-1.70	0.60-2.00	0.13-0.18	0.0-1.0	.10	.17			
	22-29	0-15	1.50-1.80	2.00-6.00	0.06-0.08	0.0-1.0	.05	.17			
	29-46	0-15	1.50-1.80	2.00-6.00	0.05-0.07	0.0-1.0	.05	.17			
	46-80	---	---	0.00-0.01	---	---	---	---			
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
Peshekee-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	2	5	56
	1-4	3-20	1.35-1.55	0.60-2.00	0.13-0.24	0.0-1.0	.20	.37			
	4-6	3-20	1.40-1.70	0.60-2.00	0.13-0.22	0.0-1.0	.24	.43			
	6-9	3-20	1.40-1.70	0.60-2.00	0.13-0.22	0.0-1.0	.28	.43			
	9-19	3-20	1.40-1.70	0.60-2.00	0.10-0.17	0.0-1.0	.20	.37			
	19-80	---	---	0.00-0.01	---	---	---	---			
Rock outcrop.											
369E:											
Michigamme-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	4	5	56
	1-2	0-20	1.30-1.60	2.00-6.00	0.11-0.12	0.0-3.0	.10	.24			
	2-4	0-20	1.30-1.60	0.60-2.00	0.15-0.16	0.0-3.0	.20	.43			
	4-7	0-20	1.35-1.70	0.60-2.00	0.18-0.20	0.0-3.0	.28	.43			
	7-14	0-20	1.35-1.70	0.60-2.00	0.15-0.16	0.0-3.0	.24	.43			
	14-20	0-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.28	.43			
	20-24	0-20	1.35-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.15	.43			
	24-31	0-20	1.60-1.80	0.00-0.06	0.11-0.13	0.0-3.0	.15	.28			
	31-80	---	---	0.00-0.01	---	---	---	---			
Schweitzer-----	0-1	2-20	1.30-1.60	0.60-2.00	0.13-0.24	0.0-3.0	.24	.32	4	8	0
	1-5	2-20	1.30-1.60	0.60-2.00	0.13-0.24	0.0-3.0	.20	.37			
	5-8	2-20	1.35-1.70	0.60-2.00	0.13-0.24	0.0-3.0	.15	.28			
	8-21	2-20	1.35-1.70	0.60-2.00	0.13-0.24	0.0-3.0	.15	.28			
	21-27	0-15	1.80-2.10	0.00-0.06	0.01-0.03	0.0-1.0	.02	.17			
	27-43	0-15	1.80-2.10	0.00-0.06	0.01-0.03	0.0-1.0	.02	.17			
	43-61	0-15	1.60-1.80	0.60-2.00	0.02-0.04	0.0-1.0	.15	.28			
	61-80	0-15	1.60-1.80	0.60-2.00	0.02-0.04	0.0-3.0	.02	.17			
Peshekee-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	2	5	56
	1-4	3-20	1.35-1.55	0.60-2.00	0.13-0.24	0.0-1.0	.20	.37			
	4-6	3-20	1.40-1.70	0.60-2.00	0.13-0.22	0.0-1.0	.24	.43			
	6-9	3-20	1.40-1.70	0.60-2.00	0.13-0.22	0.0-1.0	.28	.43			
	9-19	3-20	1.40-1.70	0.60-2.00	0.10-0.17	0.0-1.0	.20	.37			
	19-80	---	---	0.00-0.01	---	---	---	---			
Rock outcrop.											

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
369F:											
Michigamme-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	4	5	56
	1-2	0-20	1.30-1.60	2.00-6.00	0.11-0.12	0.0-3.0	.10	.24			
	2-4	0-20	1.30-1.60	0.60-2.00	0.15-0.16	0.0-3.0	.20	.43			
	4-7	0-20	1.35-1.70	0.60-2.00	0.18-0.20	0.0-3.0	.28	.43			
	7-14	0-20	1.35-1.70	0.60-2.00	0.15-0.16	0.0-3.0	.24	.43			
	14-20	0-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.28	.43			
	20-24	0-20	1.35-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.15	.43			
	24-31	0-20	1.60-1.80	0.00-0.06	0.11-0.13	0.0-3.0	.15	.28			
	31-80	---	---	0.00-0.01	---	---	---	---			
Schweitzer-----	0-1	2-20	1.30-1.60	0.60-2.00	0.13-0.24	0.0-3.0	.24	.32	4	8	0
	1-5	2-20	1.30-1.60	0.60-2.00	0.13-0.24	0.0-3.0	.20	.37			
	5-8	2-20	1.35-1.70	0.60-2.00	0.13-0.24	0.0-3.0	.15	.28			
	8-21	2-20	1.35-1.70	0.60-2.00	0.13-0.24	0.0-3.0	.15	.28			
	21-27	0-15	1.80-2.10	0.00-0.06	0.01-0.03	0.0-1.0	.02	.17			
	27-43	0-15	1.80-2.10	0.00-0.06	0.01-0.03	0.0-1.0	.02	.17			
	43-61	0-15	1.60-1.80	0.60-2.00	0.02-0.04	0.0-1.0	.15	.28			
	61-80	0-15	1.60-1.80	0.60-2.00	0.02-0.04	0.0-3.0	.02	.17			
Peshekee-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	2	5	56
	1-4	3-20	1.35-1.55	0.60-2.00	0.13-0.24	0.0-1.0	.20	.37			
	4-6	3-20	1.40-1.70	0.60-2.00	0.13-0.22	0.0-1.0	.24	.43			
	6-9	3-20	1.40-1.70	0.60-2.00	0.13-0.22	0.0-1.0	.28	.43			
	9-19	3-20	1.40-1.70	0.60-2.00	0.10-0.17	0.0-1.0	.20	.37			
	19-80	---	---	0.00-0.01	---	---	---	---			
Rock outcrop.											
370E:											
Peshekee-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	2	5	56
	1-4	3-20	1.35-1.55	0.60-2.00	0.13-0.24	0.0-1.0	.20	.37			
	4-6	3-20	1.40-1.70	0.60-2.00	0.13-0.22	0.0-1.0	.24	.43			
	6-9	3-20	1.40-1.70	0.60-2.00	0.13-0.22	0.0-1.0	.28	.43			
	9-19	3-20	1.40-1.70	0.60-2.00	0.10-0.17	0.0-1.0	.20	.37			
	19-80	---	---	0.00-0.01	---	---	---	---			
Rock outcrop.											
370F:											
Peshekee-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	2	5	56
	1-4	3-20	1.35-1.55	0.60-2.00	0.13-0.24	0.0-1.0	.20	.37			
	4-6	3-20	1.40-1.70	0.60-2.00	0.13-0.22	0.0-1.0	.24	.43			
	6-9	3-20	1.40-1.70	0.60-2.00	0.13-0.22	0.0-1.0	.28	.43			
	9-19	3-20	1.40-1.70	0.60-2.00	0.10-0.17	0.0-1.0	.20	.37			
	19-80	---	---	0.00-0.01	---	---	---	---			
Rock outcrop.											
375.											
Dumps and Pits, mine											
380:											
Beseman-----	0-2	---	0.10-0.18	0.60-6.00	0.45-0.55	---	---	---	5	5	56
	2-9	---	0.04-0.15	6.00-20.00	0.55-0.65	---	---	---			
	9-28	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	28-35	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	35-44	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	44-47	2-27	1.10-1.35	0.20-0.60	0.17-0.19	0.0-3.0	.37	.37			
	47-57	2-27	1.10-1.35	0.20-0.60	0.20-0.22	0.0-3.0	.43	.43			
	57-67	2-27	1.50-1.85	0.20-0.60	0.20-0.22	0.0-3.0	.43	.43			
	67-80	2-27	1.70-1.80	0.20-0.60	0.20-0.22	0.0-3.0	.43	.43			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
380:											
Greenwood-----	0-8	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	8	0
	8-11	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---			
	11-65	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---			
	65-80	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---			
382:											
Cathro-----	0-6	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	5	8	0
	6-31	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	31-80	5-30	1.70-1.80	0.60-2.00	0.10-0.22	0.0-3.0	.20	.28			
Arnheim-----	0-5	3-18	1.15-1.60	0.60-2.00	0.12-0.35	0.0-1.0	.37	.37	5	8	0
	5-10	3-18	1.50-1.80	0.60-2.00	0.09-0.22	0.0-1.0	.43	.43			
	10-80	3-18	1.46-1.80	0.60-2.00	0.08-0.22	0.0-1.0	.24	.24			
388:											
Gay-----	0-4	---	0.20-0.30	0.60-6.00	0.35-0.45	---	---	---	5	3	86
	4-7	2-10	1.10-1.50	0.60-2.00	0.07-0.18	0.0-2.9	.24	.24			
	7-11	2-10	1.10-1.60	0.60-2.00	0.07-0.15	0.0-2.9	.24	.24			
	11-16	6-18	1.50-1.85	0.60-2.00	0.10-0.18	0.0-2.9	.28	.28			
	16-30	6-15	1.70-1.80	0.60-2.00	0.09-0.13	0.0-2.9	.28	.28			
	30-80	6-12	1.70-1.80	0.60-2.00	0.09-0.13	0.0-2.9	.28	.28			
Tula-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-5	2-18	1.20-1.50	0.60-2.00	0.10-0.20	0.0-3.0	.15	.28			
	5-8	2-18	1.20-1.50	0.60-2.00	0.10-0.20	0.0-3.0	.15	.28			
	8-20	2-18	1.35-1.60	0.60-2.00	0.10-0.18	0.0-3.0	.15	.28			
	20-28	2-18	1.35-1.60	0.60-2.00	0.08-0.15	0.0-3.0	.15	.28			
	28-37	2-18	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.15	.28			
	37-62	2-20	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.24	.37			
	62-80	2-18	1.55-1.70	0.60-2.00	0.07-0.14	0.0-3.0	.15	.15			
398B:											
Tula-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-5	2-18	1.20-1.50	0.60-2.00	0.10-0.20	0.0-3.0	.15	.28			
	5-8	2-18	1.20-1.50	0.60-2.00	0.10-0.20	0.0-3.0	.15	.28			
	8-20	2-18	1.35-1.60	0.60-2.00	0.10-0.18	0.0-3.0	.15	.28			
	20-28	2-18	1.35-1.60	0.60-2.00	0.08-0.15	0.0-3.0	.15	.28			
	28-37	2-18	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.15	.28			
	37-62	2-20	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.24	.37			
	62-80	2-18	1.55-1.70	0.60-2.00	0.07-0.14	0.0-3.0	.15	.15			
Gay-----	0-4	---	0.20-0.30	0.60-6.00	0.35-0.45	---	---	---	5	3	86
	4-7	2-10	1.10-1.50	0.60-2.00	0.07-0.18	0.0-2.9	.24	.24			
	7-11	2-10	1.10-1.60	0.60-2.00	0.07-0.15	0.0-2.9	.24	.24			
	11-16	6-18	1.50-1.85	0.60-2.00	0.10-0.18	0.0-2.9	.28	.28			
	16-30	6-15	1.70-1.80	0.60-2.00	0.09-0.13	0.0-2.9	.28	.28			
	30-80	6-12	1.70-1.80	0.60-2.00	0.09-0.13	0.0-2.9	.28	.28			
Wakefield-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	3	5	56
	1-4	4-20	1.35-1.55	0.60-2.00	0.49-0.54	0.0-3.0	.28	.32			
	4-7	4-20	1.35-1.55	0.60-2.00	0.54-0.59	0.0-3.0	.37	.43			
	7-10	4-20	1.40-1.70	0.60-2.00	0.49-0.54	0.0-3.0	.28	.32			
	10-16	4-20	1.40-1.70	0.60-2.00	0.37-0.41	0.0-3.0	.24	.24			
	16-26	3-28	1.40-1.70	0.00-0.06	0.10-0.10	0.0-1.0	.24	.28			
	26-54	3-28	1.40-1.70	0.00-0.06	0.10-0.10	0.0-1.0	.37	.43			
	54-70	3-20	1.40-1.70	0.60-2.00	0.34-0.39	0.0-3.0	.20	.24			
	70-80	3-20	1.45-1.75	0.60-2.00	0.34-0.39	0.0-3.0	.24	.28			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
418: Loxley-----	0-5	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	5	8	0
	5-26	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	26-45	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	45-80	---	0.10-0.20	0.20-6.00	0.45-0.55	---	---	---			
Beseman-----	0-2	---	0.10-0.18	0.60-6.00	0.45-0.55	---	---	---	5	5	56
	2-9	---	0.04-0.15	6.00-20.00	0.55-0.65	---	---	---			
	9-28	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	28-35	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	35-44	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	44-47	2-27	1.10-1.35	0.20-0.60	0.17-0.19	0.0-3.0	.37	.37			
	47-57	2-27	1.10-1.35	0.20-0.60	0.20-0.22	0.0-3.0	.43	.43			
	57-67	2-27	1.50-1.85	0.20-0.60	0.20-0.22	0.0-3.0	.43	.43			
	67-80	2-27	1.70-1.80	0.20-0.60	0.20-0.22	0.0-3.0	.43	.43			
419: Pleine-----	0-9	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	5	8	0
	9-20	5-15	1.10-1.35	0.60-2.00	0.16-0.22	0.0-2.9	.24	.28			
	20-33	5-15	1.50-1.85	0.60-2.00	0.15-0.19	0.0-2.9	.24	.28			
	33-80	5-15	1.55-1.70	0.60-2.00	0.11-0.16	0.0-2.9	.24	.28			
Cathro-----	0-6	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	5	8	0
	6-31	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	31-80	5-30	1.70-1.80	0.60-2.00	0.10-0.22	0.0-3.0	.20	.28			
Gay-----	0-4	---	0.20-0.30	0.60-6.00	0.35-0.45	---	---	---	5	3	86
	4-7	2-10	1.10-1.50	0.60-2.00	0.07-0.18	0.0-2.9	.24	.24			
	7-11	2-10	1.10-1.60	0.60-2.00	0.07-0.15	0.0-2.9	.24	.24			
	11-16	6-18	1.50-1.85	0.60-2.00	0.10-0.18	0.0-2.9	.28	.28			
	16-30	6-15	1.70-1.80	0.60-2.00	0.09-0.13	0.0-2.9	.28	.28			
	30-80	6-12	1.70-1.80	0.60-2.00	0.09-0.13	0.0-2.9	.28	.28			
424: Gay-----	0-4	---	0.10-0.20	0.60-6.00	0.40-0.60	---	---	---	5	3	86
	4-7	2-10	1.10-1.50	0.60-2.00	0.07-0.18	0.0-2.9	.24	.24			
	7-11	2-10	1.10-1.60	0.60-2.00	0.07-0.15	0.0-2.9	.24	.24			
	11-16	6-18	1.50-1.85	0.60-2.00	0.10-0.18	0.0-2.9	.28	.28			
	16-30	6-15	1.70-1.80	0.60-2.00	0.09-0.13	0.0-2.9	.28	.28			
	30-80	6-12	1.70-1.80	0.60-2.00	0.09-0.13	0.0-2.9	.28	.28			
425: Foxpaw-----	0-1	---	0.05-0.15	0.20-6.00	0.05-0.15	---	---	---	5	5	56
	1-3	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	3-8	5-20	1.10-1.35	0.60-2.00	0.17-0.19	0.0-3.0	.24	.32			
	8-15	2-20	1.50-1.85	0.60-2.00	0.13-0.15	0.0-3.0	.17	.24			
	15-23	1-20	1.50-1.85	0.60-2.00	0.13-0.15	0.0-3.0	.17	.24			
	23-32	1-20	1.50-1.85	0.60-2.00	0.10-0.13	0.0-3.0	.17	.24			
	32-80	1-20	1.70-1.80	0.60-2.00	0.11-0.13	0.0-3.0	.20	.24			
Gay-----	0-4	---	0.10-0.20	0.20-6.00	0.40-0.60	---	.02	.02	5	3	86
	4-7	2-10	1.10-1.50	0.60-2.00	0.07-0.18	0.0-2.9	.24	.24			
	7-11	2-10	1.10-1.60	0.60-2.00	0.07-0.15	0.0-2.9	.24	.24			
	11-16	6-18	1.50-1.85	0.60-2.00	0.10-0.18	0.0-2.9	.28	.28			
	16-30	6-15	1.70-1.80	0.60-2.00	0.09-0.13	0.0-2.9	.28	.28			
	30-80	6-12	1.70-1.80	0.60-2.00	0.09-0.13	0.0-2.9	.28	.28			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
428C: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
Michigamme-----	0-1	---	0.05-0.15	5.99-19.99	0.55-0.65	---	---	---	4	5	56
	1-2	0-20	1.30-1.60	2.00-6.00	0.11-0.12	0.0-3.0	.10	.24			
	2-4	0-20	1.30-1.60	0.60-2.00	0.15-0.16	0.0-3.0	.20	.43			
	4-7	0-20	1.35-1.70	0.60-2.00	0.18-0.20	0.0-3.0	.28	.43			
	7-14	0-20	1.35-1.70	0.60-2.00	0.15-0.16	0.0-3.0	.24	.43			
	14-20	0-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.28	.43			
	20-24	0-20	1.35-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.15	.43			
	24-31	0-20	1.60-1.80	0.00-0.06	0.11-0.13	0.0-3.0	.15	.28			
	31-80	---	---	---	---	---	---	---			
428D: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
Michigamme-----	0-1	---	0.05-0.15	5.99-19.99	0.55-0.65	---	---	---	4	5	56
	1-2	0-20	1.30-1.60	2.00-6.00	0.11-0.12	0.0-3.0	.10	.24			
	2-4	0-20	1.30-1.60	0.60-2.00	0.15-0.16	0.0-3.0	.20	.43			
	4-7	0-20	1.35-1.70	0.60-2.00	0.18-0.20	0.0-3.0	.28	.43			
	7-14	0-20	1.35-1.70	0.60-2.00	0.15-0.16	0.0-3.0	.24	.43			
	14-20	0-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.28	.43			
	20-24	0-20	1.35-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.15	.43			
	24-31	0-20	1.60-1.80	0.00-0.06	0.11-0.13	0.0-3.0	.15	.28			
	31-80	---	---	---	---	---	---	---			
429B: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
Peshekee-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	2	5	56
	1-4	3-20	1.35-1.55	0.60-2.00	0.13-0.24	0.0-1.0	.20	.37			
	4-6	3-20	1.40-1.70	0.60-2.00	0.13-0.22	0.0-1.0	.24	.43			
	6-9	3-20	1.40-1.70	0.60-2.00	0.13-0.22	0.0-1.0	.28	.43			
	9-19	3-20	1.40-1.70	0.60-2.00	0.10-0.17	0.0-1.0	.20	.37			
	19-80	---	---	0.00-0.01	---	---	---	---			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
429C: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
Peshekee-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	2	5	56
	1-4	3-20	1.35-1.55	0.60-2.00	0.13-0.24	0.0-1.0	.20	.37			
	4-6	3-20	1.40-1.70	0.60-2.00	0.13-0.22	0.0-1.0	.24	.43			
	6-9	3-20	1.40-1.70	0.60-2.00	0.13-0.22	0.0-1.0	.28	.43			
	9-19	3-20	1.40-1.70	0.60-2.00	0.10-0.17	0.0-1.0	.20	.37			
	19-80	---	---	0.00-0.01	---	---	---	---			
429D: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
Peshekee-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	2	5	56
	1-4	3-20	1.35-1.55	0.60-2.00	0.13-0.24	0.0-1.0	.20	.37			
	4-6	3-20	1.40-1.70	0.60-2.00	0.13-0.22	0.0-1.0	.24	.43			
	6-9	3-20	1.40-1.70	0.60-2.00	0.13-0.22	0.0-1.0	.28	.43			
	9-19	3-20	1.40-1.70	0.60-2.00	0.10-0.17	0.0-1.0	.20	.37			
	19-80	---	---	0.00-0.01	---	---	---	---			
429E: Schweitzer-----	0-1	2-20	1.30-1.60	0.60-2.00	0.13-0.24	0.0-3.0	.24	.32	4	8	0
	1-5	2-20	1.30-1.60	0.60-2.00	0.13-0.24	0.0-3.0	.20	.37			
	5-8	2-20	1.35-1.70	0.60-2.00	0.13-0.24	0.0-3.0	.15	.28			
	8-21	2-20	1.35-1.70	0.60-2.00	0.13-0.24	0.0-3.0	.15	.28			
	21-27	0-15	1.80-2.10	0.00-0.06	0.01-0.03	0.0-1.0	.02	.17			
	27-43	0-15	1.80-2.10	0.00-0.06	0.01-0.03	0.0-1.0	.02	.17			
	43-61	0-15	1.60-1.80	0.60-2.00	0.02-0.04	0.0-1.0	.15	.28			
	61-80	0-15	1.60-1.80	0.60-2.00	0.02-0.04	0.0-3.0	.02	.17			
Peshekee-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	2	5	56
	1-4	3-20	1.35-1.55	0.60-2.00	0.13-0.24	0.0-1.0	.20	.37			
	4-6	3-20	1.40-1.70	0.60-2.00	0.13-0.22	0.0-1.0	.24	.43			
	6-9	3-20	1.40-1.70	0.60-2.00	0.13-0.22	0.0-1.0	.28	.43			
	9-19	3-20	1.40-1.70	0.60-2.00	0.10-0.17	0.0-1.0	.20	.37			
	19-80	---	---	0.00-0.01	---	---	---	---			
430B: Stutts-----	0-1	---	0.10-0.20	0.20-6.00	0.45-0.55	---	---	---	3	2	134
	1-6	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	6-8	0-15	1.35-1.70	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	8-15	0-15	1.30-1.70	2.00-20.00	0.06-0.08	0.0-1.0	.17	.17			
	15-18	0-10	1.30-1.70	2.00-20.00	0.06-0.08	0.0-1.0	.15	.15			
	18-28	0-4	1.30-1.70	2.00-20.00	0.06-0.08	---	.15	.15			
	28-80	0-4	1.55-1.75	2.00-20.00	0.05-0.07	---	.15	.15			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
430C: Stutts-----	0-1	---	0.10-0.20	0.20-6.00	0.45-0.55	---	---	---	3	2	134
	1-6	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	6-8	0-15	1.35-1.70	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	8-15	0-15	1.30-1.70	2.00-6.00	0.06-0.08	0.0-1.0	.17	.17			
	15-18	0-10	1.30-1.70	2.00-6.00	0.06-0.08	0.0-1.0	.15	.15			
	18-28	0-4	1.30-1.70	6.00-20.00	0.06-0.08	---	.15	.15			
	28-80	0-4	1.55-1.75	6.00-20.00	0.05-0.07	---	.15	.15			
430D: Stutts-----	0-1	---	0.10-0.20	0.20-6.00	0.45-0.55	---	---	---	3	2	134
	1-6	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	6-8	0-15	1.35-1.70	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	8-15	0-15	1.30-1.70	2.00-20.00	0.06-0.08	0.0-1.0	.17	.17			
	15-18	0-10	1.30-1.70	2.00-20.00	0.06-0.08	0.0-1.0	.15	.15			
	18-28	0-4	1.30-1.70	2.00-20.00	0.06-0.08	---	.15	.15			
	28-80	0-4	1.55-1.75	2.00-20.00	0.05-0.07	---	.15	.15			
430E: Stutts-----	0-1	---	0.10-0.20	0.20-6.00	0.45-0.55	---	---	---	3	2	134
	1-6	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	6-8	0-15	1.35-1.70	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	8-15	0-15	1.30-1.70	2.00-20.00	0.06-0.08	0.0-1.0	.17	.17			
	15-18	0-10	1.30-1.70	2.00-20.00	0.06-0.08	0.0-1.0	.15	.15			
	18-28	0-4	1.30-1.70	2.00-20.00	0.06-0.08	---	.15	.15			
	28-80	0-4	1.55-1.75	2.00-20.00	0.05-0.07	---	.15	.15			
432C: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
Michigamme-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	4	5	56
	1-2	0-20	1.30-1.60	2.00-6.00	0.11-0.12	0.0-3.0	.10	.24			
	2-4	0-20	1.30-1.60	0.60-2.00	0.15-0.16	0.0-3.0	.20	.43			
	4-7	0-20	1.35-1.70	0.60-2.00	0.18-0.20	0.0-3.0	.28	.43			
	7-14	0-20	1.35-1.70	0.60-2.00	0.15-0.16	0.0-3.0	.24	.43			
	14-20	0-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.28	.43			
	20-24	0-20	1.35-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.15	.43			
	24-31	0-20	1.60-1.80	0.00-0.06	0.11-0.13	0.0-3.0	.15	.28			
	31-80	---	---	---	---	---	---	---			
Rock outcrop.											
432D: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
432D: Michigamme-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	4	5	56
	1-2	0-20	1.30-1.60	2.00-6.00	0.11-0.12	0.0-3.0	.10	.24			
	2-4	0-20	1.30-1.60	0.60-2.00	0.15-0.16	0.0-3.0	.20	.43			
	4-7	0-20	1.35-1.70	0.60-2.00	0.18-0.20	0.0-3.0	.28	.43			
	7-14	0-20	1.35-1.70	0.60-2.00	0.15-0.16	0.0-3.0	.24	.43			
	14-20	0-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.28	.43			
	20-24	0-20	1.35-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.15	.43			
	24-31	0-20	1.60-1.80	2.00-6.00	0.11-0.13	0.0-3.0	.15	.28			
	31-80	---	---	---	---	---	---	---			
Rock outcrop.											
432E: Schweitzer-----	0-1	2-20	1.30-1.60	0.60-2.00	0.13-0.24	0.0-3.0	.24	.32	4	8	86
	1-5	2-20	1.30-1.60	0.60-2.00	0.13-0.24	0.0-3.0	.20	.37			
	5-8	2-20	1.35-1.70	0.60-2.00	0.13-0.24	0.0-3.0	.15	.28			
	8-21	2-20	1.35-1.70	0.60-2.00	0.13-0.24	0.0-3.0	.15	.28			
	21-27	0-15	1.80-2.10	0.00-0.06	0.01-0.03	0.0-1.0	.02	.17			
	27-43	0-15	1.80-2.10	0.00-0.06	0.01-0.03	0.0-1.0	.02	.17			
	43-61	0-15	1.60-1.80	0.60-2.00	0.02-0.04	0.0-1.0	.15	.28			
	61-80	0-15	1.60-1.80	0.60-2.00	0.02-0.04	0.0-3.0	.02	.17			
Michigamme-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	4	3	86
	1-2	0-20	1.30-1.60	2.00-6.00	0.11-0.12	0.0-3.0	.10	.24			
	2-4	0-20	1.30-1.60	0.60-2.00	0.15-0.16	0.0-3.0	.20	.43			
	4-7	0-20	1.35-1.70	0.60-2.00	0.18-0.20	0.0-3.0	.28	.43			
	7-14	0-20	1.35-1.70	0.60-2.00	0.15-0.16	0.0-3.0	.24	.43			
	14-20	0-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.28	.43			
	20-24	0-20	1.35-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.15	.43			
	24-31	0-20	1.60-1.80	2.00-6.00	0.11-0.13	0.0-3.0	.15	.28			
	31-80	---	---	---	---	---	---	---			
Rock outcrop.											
432F: Schweitzer-----	0-1	2-20	1.30-1.60	0.60-2.00	0.13-0.24	0.0-3.0	.24	.32	4	8	0
	1-5	2-20	1.30-1.60	0.60-2.00	0.13-0.24	0.0-3.0	.20	.37			
	5-8	2-20	1.35-1.70	0.60-2.00	0.13-0.24	0.0-3.0	.15	.28			
	8-21	2-20	1.35-1.70	0.60-2.00	0.13-0.24	0.0-3.0	.15	.28			
	21-27	0-15	1.80-2.10	0.00-0.06	0.01-0.03	0.0-1.0	.02	.17			
	27-43	0-15	1.80-2.10	0.00-0.06	0.01-0.03	0.0-1.0	.02	.17			
	43-61	0-15	1.60-1.80	0.60-2.00	0.02-0.04	0.0-1.0	.15	.28			
	61-80	0-15	1.60-1.80	0.60-2.00	0.02-0.04	0.0-3.0	.02	.17			
Michigamme-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	4	3	86
	1-2	0-20	1.30-1.60	2.00-6.00	0.11-0.12	0.0-3.0	.10	.24			
	2-4	0-20	1.30-1.60	0.60-2.00	0.15-0.16	0.0-3.0	.20	.43			
	4-7	0-20	1.35-1.70	0.60-2.00	0.18-0.20	0.0-3.0	.28	.43			
	7-14	0-20	1.35-1.70	0.60-2.00	0.15-0.16	0.0-3.0	.24	.43			
	14-20	0-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.28	.43			
	20-24	0-20	1.35-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.15	.43			
	24-31	0-20	1.60-1.80	2.00-6.00	0.11-0.13	0.0-3.0	.15	.28			
	31-80	---	---	---	---	---	---	---			
Rock outcrop.											

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
433B: McMillan-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-2	0-10	1.35-1.55	0.60-2.00	0.13-0.15	0.0-1.0	.24	.24			
	2-5	0-10	1.35-1.55	0.60-2.00	0.22-0.24	0.0-1.0	.24	.24			
	5-9	0-10	1.40-1.70	0.60-2.00	0.16-0.18	0.0-1.0	.24	.24			
	9-14	0-10	1.40-1.70	0.60-2.00	0.09-0.11	0.0-1.0	.24	.24			
	14-19	0-10	1.40-1.70	6.00-20.00	0.06-0.08	0.0-1.0	.24	.24			
	19-29	0-5	1.35-1.55	6.00-20.00	0.02-0.04	0.0-0.5	.15	.15			
	29-72	0-5	1.35-1.55	6.00-20.00	0.02-0.04	0.0-0.5	.15	.15			
	72-80	0-2	1.45-1.75	6.00-20.00	0.02-0.03	---	.10	.10			
433C: McMillan-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-2	0-10	1.35-1.55	0.60-2.00	0.13-0.15	0.0-1.0	.24	.24			
	2-5	0-10	1.35-1.55	0.60-2.00	0.22-0.24	0.0-1.0	.24	.24			
	5-9	0-10	1.40-1.70	0.60-2.00	0.16-0.18	0.0-1.0	.24	.24			
	9-14	0-10	1.40-1.70	0.60-2.00	0.09-0.11	0.0-1.0	.24	.24			
	14-19	0-10	1.40-1.70	6.00-20.00	0.06-0.08	0.0-1.0	.24	.24			
	19-29	0-5	1.35-1.55	6.00-20.00	0.02-0.04	0.0-0.5	.15	.15			
	29-72	0-5	1.35-1.55	6.00-20.00	0.02-0.04	0.0-0.5	.15	.15			
	72-80	0-2	1.45-1.75	6.00-20.00	0.02-0.03	---	.10	.10			
433D: McMillan-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-2	0-10	1.35-1.55	0.60-2.00	0.13-0.15	0.0-1.0	.24	.24			
	2-5	0-10	1.35-1.55	0.60-2.00	0.22-0.24	0.0-1.0	.24	.24			
	5-9	0-10	1.40-1.70	0.60-2.00	0.16-0.18	0.0-1.0	.24	.24			
	9-14	0-10	1.40-1.70	0.60-2.00	0.09-0.11	0.0-1.0	.24	.24			
	14-19	0-10	1.40-1.70	6.00-20.00	0.06-0.08	0.0-1.0	.24	.24			
	19-29	0-5	1.35-1.55	6.00-20.00	0.02-0.04	0.0-0.5	.15	.15			
	29-72	0-5	1.35-1.55	6.00-20.00	0.02-0.04	0.0-0.5	.15	.15			
	72-80	0-2	1.45-1.75	6.00-20.00	0.02-0.03	---	.10	.10			
435C: Kalkaska-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	2	1	220
	2-6	0-5	1.30-1.55	6.00-20.00	0.07-0.09	---	.15	.15			
	6-8	0-5	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	8-17	0-5	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	17-32	0-5	1.55-1.65	6.00-20.00	0.05-0.07	---	.15	.15			
	32-80	0-5	1.55-1.65	6.00-20.00	0.05-0.07	---	.15	.15			
Waiska-----	0-1	---	0.10-0.20	20.00-59.94	0.45-0.55	---	---	---	5	2	134
	1-4	0-6	1.40-1.70	20.00-59.94	0.03-0.11	0.0-2.9	.15	.15			
	4-8	0-6	1.40-1.65	20.00-59.94	0.03-0.08	0.0-2.9	.05	.10			
	8-18	0-5	1.40-1.65	20.00-59.94	0.02-0.07	0.0-2.9	.05	.10			
	18-35	0-5	1.50-1.60	20.00-59.94	0.01-0.03	0.0-2.9	.02	.10			
	35-61	0-5	1.50-1.60	20.00-59.94	0.01-0.03	0.0-2.9	.02	.10			
435D: Kalkaska-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	2	1	220
	2-6	0-5	1.30-1.55	6.00-20.00	0.07-0.09	---	.15	.15			
	6-8	0-5	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	8-17	0-5	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	17-32	0-5	1.55-1.65	6.00-20.00	0.05-0.07	---	.15	.15			
	32-80	0-5	1.55-1.65	6.00-20.00	0.05-0.07	---	.15	.15			
Waiska-----	0-1	---	0.10-0.20	20.00-59.94	0.45-0.55	---	---	---	5	2	134
	1-4	0-6	1.40-1.70	20.00-59.94	0.03-0.11	0.0-2.9	.15	.15			
	4-8	0-6	1.40-1.65	20.00-59.94	0.03-0.08	0.0-2.9	.05	.10			
	8-18	0-5	1.40-1.65	20.00-59.94	0.02-0.07	0.0-2.9	.05	.10			
	18-35	0-5	1.50-1.60	20.00-59.94	0.01-0.03	0.0-2.9	.02	.10			
	35-61	0-5	1.50-1.60	20.00-59.94	0.01-0.03	0.0-2.9	.02	.10			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
435E:											
Kalkaska-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	2	1	220
	2-6	0-5	1.30-1.55	6.00-20.00	0.07-0.09	---	.15	.15			
	6-8	0-5	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	8-17	0-5	1.40-1.65	6.00-20.00	0.06-0.08	---	.15	.15			
	17-32	0-5	1.55-1.65	6.00-20.00	0.05-0.07	---	.15	.15			
	32-80	0-5	1.55-1.65	6.00-20.00	0.05-0.07	---	.15	.15			
Waiska-----	0-1	---	0.10-0.20	20.00-59.94	0.45-0.55	---	---	---	5	2	134
	1-4	0-6	1.40-1.70	20.00-59.94	0.03-0.11	0.0-2.9	.15	.15			
	4-8	0-6	1.40-1.65	20.00-59.94	0.03-0.08	0.0-2.9	.05	.10			
	8-18	0-5	1.40-1.65	20.00-59.94	0.02-0.07	0.0-2.9	.05	.10			
	18-35	0-5	1.50-1.60	20.00-59.94	0.01-0.03	0.0-2.9	.02	.10			
	35-61	0-5	1.50-1.60	20.00-59.94	0.01-0.03	0.0-2.9	.02	.10			
437B:											
Manitowish-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	4	3	86
	1-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---			
	2-4	0-10	1.35-1.65	0.60-2.00	0.13-0.15	0.0-3.0	.17	.24			
	4-5	0-18	1.30-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.17	.24			
	5-11	0-18	1.30-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.17	.24			
	11-22	0-18	1.30-1.70	0.60-2.00	0.12-0.14	0.0-3.0	.17	.24			
	22-40	0-14	1.55-1.75	2.00-6.00	0.06-0.08	0.0-3.0	.10	.17			
	40-80	0-8	1.55-1.75	6.00-20.00	0.04-0.06	---	.10	.15			
Channing-----	0-2	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	3	86
	2-6	2-12	1.10-1.35	0.60-2.00	0.07-0.18	0.0-2.9	.17	.24			
	6-7	2-12	1.10-1.35	0.60-2.00	0.07-0.18	0.0-2.9	.17	.24			
	7-16	2-15	1.25-1.70	0.60-2.00	0.09-0.19	0.0-2.9	.24	.32			
	16-24	2-15	1.25-1.70	0.60-2.00	0.09-0.19	0.0-2.9	.24	.32			
	24-29	0-5	1.50-1.65	20.00-99.90	0.02-0.04	0.0-2.9	.10	.15			
	29-62	0-5	1.50-1.65	20.00-99.90	0.02-0.04	0.0-2.9	.10	.15			
448F:											
Rockland-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	5	56
	1-5	1-15	1.50-1.67	0.60-2.00	0.22-0.24	0.0-3.0	.28	.28			
	5-22	5-30	1.37-1.71	0.20-0.60	0.19-0.21	0.0-3.0	.24	.28			
	22-80	5-30	1.60-1.75	0.20-0.60	0.19-0.21	0.0-3.0	.24	.28			
Rock outcrop.											
449C:											
Flintsteel-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	5	56
	1-5	25-60	1.20-1.40	0.60-2.00	0.12-0.14	1.0-10.0	.28	.28			
	5-9	5-10	1.45-1.80	0.60-2.00	0.14-0.24	1.0-2.0	.32	.32			
	9-12	9-24	1.45-1.90	0.20-0.60	0.14-0.24	1.0-3.0	.24	.28			
	12-16	10-24	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	16-22	10-27	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	22-36	15-28	1.60-1.85	0.20-0.60	0.14-0.20	1.0-3.0	.32	.43			
	36-48	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.32	.43			
	48-80	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.43	.43			
Minocqua-----	0-4	---	0.15-0.45	2.00-6.00	0.35-0.45	---	.02	.02	4	8	0
	4-15	10-17	1.50-1.60	0.60-2.00	0.11-0.19	0.0-2.9	.37	.37			
	15-28	7-17	1.40-1.70	0.60-2.00	0.06-0.19	0.0-2.9	.32	.32			
	28-60	0-5	1.55-1.80	6.00-20.00	0.01-0.07	0.0-2.9	.10	.15			
452F:											
Rockland-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	5	56
	1-5	1-15	1.50-1.67	0.60-2.00	0.22-0.24	0.0-3.0	.28	.28			
	5-23	5-30	1.37-1.71	0.20-0.60	0.19-0.21	0.0-3.0	.24	.28			
	23-80	5-30	1.60-1.75	0.20-0.60	0.19-0.21	0.0-3.0	.24	.28			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
460B:											
Belding-----	0-1	---	0.20-0.30	0.60-6.00	0.35-0.45	---	---	---	5	3	86
	1-4	1-18	1.30-1.40	2.00-6.00	0.14-0.18	0.0-1.0	.10	.10			
	4-9	1-18	1.35-1.45	1.98-5.95	0.14-0.18	0.0-1.0	.10	.10			
	9-14	1-18	1.45-1.70	2.00-6.00	0.13-0.17	0.0-1.0	.17	.17			
	14-19	1-18	1.50-1.70	2.00-6.00	0.13-0.17	0.0-1.0	.15	.15			
	19-22	1-18	1.50-1.70	2.00-6.00	0.06-0.17	0.0-1.0	.15	.15			
	22-34	10-40	1.55-1.75	0.20-0.60	0.16-0.22	1.0-3.0	.37	.37			
	34-36	10-40	1.55-1.75	0.00-0.06	0.15-0.22	1.0-3.0	.37	.37			
	36-80	10-40	1.55-1.75	0.00-0.06	0.15-0.22	1.0-3.0	.37	.37			
Manido-----	0-3	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	2	1	220
	3-9	0-10	1.30-1.55	6.00-20.00	0.07-0.09	0.0-0.5	.15	.15			
	9-11	0-10	1.40-1.65	6.00-20.00	0.06-0.09	0.0-0.5	.15	.15			
	11-17	0-10	1.40-1.65	6.00-20.00	0.06-0.09	0.0-0.5	.15	.15			
	17-37	0-10	1.40-1.65	6.00-20.00	0.06-0.09	0.0-0.5	.15	.15			
	37-60	0-10	1.40-1.65	6.00-20.00	0.06-0.09	0.0-0.5	.15	.15			
	60-80	0-10	1.55-1.65	6.00-20.00	0.05-0.10	0.0-0.5	.15	.15			
461B:											
Loggerhead-----	0-4	2-25	1.30-1.60	0.60-2.00	0.17-0.22	0.0-3.0	.28	.32	5	3	86
	4-5	2-25	1.40-1.70	0.60-2.00	0.14-0.18	0.0-3.0	.20	.24			
	5-15	2-25	1.50-1.80	0.60-2.00	0.15-0.19	0.0-3.0	.28	.32			
	15-38	2-25	1.60-1.80	0.60-2.00	0.13-0.17	0.0-3.0	.20	.24			
	38-56	5-25	1.60-1.90	0.20-0.60	0.14-0.17	0.0-3.0	.20	.24			
	56-80	10-35	1.60-1.90	0.20-0.60	0.16-0.19	0.0-3.0	.32	.32			
462C:											
Nonesuch-----	0-1	---	0.10-0.20	1.98-6.00	0.45-0.55	---	---	---	4	5	56
	1-4	5-20	1.35-1.60	0.60-2.00	0.14-0.22	0.0-2.0	.20	.32			
	4-11	5-20	1.35-1.60	0.60-2.00	0.14-0.22	0.0-2.0	.28	.37			
	11-16	5-20	1.40-1.70	0.60-2.00	0.09-0.20	0.0-2.0	.10	.28			
	16-23	5-20	1.50-1.70	0.60-2.00	0.09-0.20	0.0-2.0	.20	.28			
	23-34	5-20	1.60-2.00	0.20-0.60	0.04-0.06	0.0-1.5	.32	.43			
	34-50	5-20	1.90-2.10	0.20-0.60	0.05-0.06	0.0-1.0	.02	.43			
	50	---	---	0.03-0.28	---	---	---	---			
Rock outcrop.											
509:											
Cathro-----	0-6	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	5	8	0
	6-31	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	31-80	5-30	1.70-1.80	0.20-2.00	0.10-0.22	0.0-3.0	.20	.28			
Minocqua-----	0-4	---	0.15-0.45	2.00-6.00	0.35-0.45	---	.02	.02	4	8	0
	4-15	10-17	1.50-1.60	0.60-2.00	0.11-0.19	0.0-2.9	.37	.37			
	15-28	7-17	1.40-1.70	0.60-2.00	0.06-0.19	0.0-2.9	.32	.32			
	28-60	0-5	1.55-1.80	6.00-20.00	0.01-0.07	0.0-2.9	.10	.15			
511A:											
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
511A:											
Tula-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-5	2-18	1.20-1.50	0.60-2.00	0.10-0.20	0.0-3.0	.15	.28			
	5-8	2-18	1.20-1.50	0.60-2.00	0.10-0.20	0.0-3.0	.15	.28			
	8-20	2-18	1.35-1.60	0.60-2.00	0.10-0.18	0.0-3.0	.15	.28			
	20-28	2-18	1.35-1.60	0.60-2.00	0.08-0.15	0.0-3.0	.15	.28			
	28-37	2-18	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.15	.28			
	37-62	2-20	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.24	.37			
	62-80	2-18	1.55-1.70	0.60-2.00	0.07-0.14	0.0-3.0	.15	.15			
Chabeneau-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	5	5	56
	1-2	1-8	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37			
	2-5	1-8	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37			
	5-10	1-8	1.35-1.55	0.60-2.00	0.15-0.22	0.0-2.9	.32	.24			
	10-22	1-8	1.35-1.55	0.60-2.00	0.15-0.22	0.0-2.9	.32	.24			
	22-30	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
	30-48	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
	48-121	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
519B:											
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
Karlin-----	0-1	---	0.10-0.20	6.00-19.99	0.45-0.55	---	---	---	4	3	86
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-2.9	.15	.15			
	4-15	0-18	1.30-1.70	2.00-6.00	0.12-0.19	0.0-2.9	.10	.10			
	15-29	0-10	1.40-1.70	6.00-19.99	0.06-0.11	0.0-2.9	.10	.10			
	29-80	0-5	1.55-1.75	6.00-19.99	0.05-0.07	0.0-2.9	.10	.10			
519C:											
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
Karlin-----	0-1	---	0.10-0.20	6.00-19.99	0.45-0.55	---	---	---	4	3	86
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-2.9	.15	.15			
	4-15	0-18	1.30-1.70	2.00-6.00	0.12-0.19	0.0-2.9	.10	.10			
	15-29	0-10	1.40-1.70	6.00-19.99	0.06-0.11	0.0-2.9	.10	.10			
	29-80	0-5	1.55-1.75	6.00-19.99	0.05-0.07	0.0-2.9	.10	.10			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
519D: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
Karlin-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-2.9	.15	.15			
	4-15	0-18	1.30-1.70	2.00-6.00	0.12-0.19	0.0-2.9	.10	.10			
	15-29	0-10	1.40-1.70	6.00-20.00	0.06-0.11	0.0-2.9	.10	.10			
	29-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	0.0-2.9	.10	.10			
522. Pits, sand and gravel											
523D: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	0-5	1.60-1.80	6.00-20.00	0.03-0.05	---	.10	.15			
Karlin-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-4	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-2.9	.15	.15			
	4-15	0-18	1.30-1.70	2.00-6.00	0.12-0.19	0.0-2.9	.10	.10			
	15-29	0-10	1.40-1.70	6.00-20.00	0.06-0.11	0.0-2.9	.10	.10			
	29-80	0-5	1.55-1.75	6.00-20.00	0.05-0.07	0.0-2.9	.10	.10			
524C: Waiska-----	0-1	---	0.10-0.20	20.00-59.94	0.45-0.55	---	---	---	5	2	134
	1-4	0-6	1.40-1.70	20.00-59.94	0.03-0.11	0.0-2.9	.15	.15			
	4-8	0-6	1.40-1.65	20.00-59.94	0.03-0.08	0.0-2.9	.05	.10			
	8-18	0-5	1.40-1.65	20.00-59.94	0.02-0.07	0.0-2.9	.05	.10			
	18-35	0-5	1.50-1.60	20.00-59.94	0.01-0.03	0.0-2.9	.02	.10			
	35-61	0-5	1.50-1.60	20.00-59.94	0.01-0.03	0.0-2.9	.02	.10			
Amasa-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-4	15-20	1.30-1.60	0.60-2.00	0.13-0.14	0.0-3.0	.15	.24			
	4-7	0-28	1.35-1.70	0.60-2.00	0.21-0.23	0.0-3.0	.37	.43			
	7-23	15-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.37	.43			
	23-28	15-20	1.35-1.70	0.60-2.00	0.14-0.15	0.0-3.0	.17	.24			
	28-41	0-10	1.55-1.65	6.00-20.00	0.05-0.06	0.0-3.0	.10	.15			
	41-80	0-10	1.55-1.65	6.00-20.00	0.03-0.04	0.0-3.0	.05	.15			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
524D:											
Waiska-----	0-1	---	0.10-0.20	20.00-59.94	0.45-0.55	---	---	---	5	2	134
	1-4	0-6	1.40-1.70	20.00-59.94	0.03-0.11	0.0-2.9	.15	.15			
	4-8	0-6	1.40-1.65	20.00-59.94	0.03-0.08	0.0-2.9	.05	.10			
	8-18	0-5	1.40-1.65	20.00-59.94	0.02-0.07	0.0-2.9	.05	.10			
	18-35	0-5	1.50-1.60	20.00-59.94	0.01-0.03	0.0-2.9	.02	.10			
	35-61	0-5	1.50-1.60	20.00-59.94	0.01-0.03	0.0-2.9	.02	.10			
Amasa-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-4	15-20	1.30-1.60	0.60-2.00	0.13-0.14	0.0-3.0	.15	.24			
	4-7	0-28	1.35-1.70	0.60-2.00	0.21-0.23	0.0-3.0	.37	.43			
	7-23	15-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.37	.43			
	23-28	15-20	1.35-1.70	0.60-2.00	0.14-0.15	0.0-3.0	.17	.24			
	28-41	0-10	1.55-1.65	6.00-20.00	0.05-0.06	0.0-3.0	.10	.15			
	41-80	0-10	1.55-1.65	6.00-20.00	0.03-0.04	0.0-3.0	.05	.15			
524E:											
Waiska-----	0-1	---	0.10-0.20	20.00-59.94	0.45-0.55	---	---	---	5	2	134
	1-4	0-6	1.40-1.70	20.00-59.94	0.03-0.11	0.0-2.9	.15	.15			
	4-8	0-6	1.40-1.65	20.00-59.94	0.03-0.08	0.0-2.9	.05	.10			
	8-18	0-5	1.40-1.65	20.00-59.94	0.02-0.07	0.0-2.9	.05	.10			
	18-35	0-5	1.50-1.60	20.00-59.94	0.01-0.03	0.0-2.9	.02	.10			
	35-61	0-5	1.50-1.60	20.00-59.94	0.01-0.03	0.0-2.9	.02	.10			
Amasa-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-4	15-20	1.30-1.60	0.60-2.00	0.13-0.14	0.0-3.0	.15	.24			
	4-7	0-28	1.35-1.70	0.60-2.00	0.21-0.23	0.0-3.0	.37	.43			
	7-23	15-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.37	.43			
	23-28	15-20	1.35-1.70	0.60-2.00	0.14-0.15	0.0-3.0	.17	.24			
	28-41	0-10	1.55-1.65	6.00-20.00	0.05-0.06	0.0-3.0	.10	.15			
	41-80	0-10	1.55-1.65	6.00-20.00	0.03-0.04	0.0-3.0	.05	.15			
527B:											
Wakefield-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	3	5	56
	1-4	7-27	1.35-1.55	0.60-2.00	0.49-0.54	0.0-3.0	.28	.32			
	4-7	4-20	1.35-1.55	0.60-2.00	0.54-0.59	0.0-3.0	.37	.43			
	7-10	4-20	1.40-1.70	0.60-2.00	0.49-0.54	0.0-3.0	.28	.32			
	10-16	4-20	1.40-1.70	0.60-2.00	0.37-0.41	0.0-3.0	.24	.24			
	16-26	3-28	1.40-1.70	0.00-0.06	0.10-0.10	0.0-1.0	.24	.28			
	26-54	3-28	1.40-1.70	0.00-0.06	0.10-0.10	0.0-1.0	.37	.43			
	54-70	3-20	1.40-1.70	0.60-2.00	0.34-0.39	0.0-3.0	.20	.24			
	70-80	3-20	1.45-1.75	0.60-2.00	0.34-0.39	0.0-3.0	.24	.28			
527C:											
Wakefield-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	3	5	56
	1-4	7-27	1.35-1.55	0.60-2.00	0.49-0.54	0.0-3.0	.28	.32			
	4-7	0-27	1.35-1.55	0.60-2.00	0.54-0.59	0.0-3.0	.37	.43			
	7-10	7-27	1.40-1.70	0.60-2.00	0.49-0.54	0.0-3.0	.28	.32			
	10-16	0-20	1.40-1.70	0.60-2.00	0.37-0.41	0.0-3.0	.24	.24			
	16-26	0-20	1.40-1.70	0.00-0.06	0.10-0.10	0.0-3.0	.24	.28			
	26-54	0-28	1.40-1.70	0.00-0.06	0.10-0.10	0.0-3.0	.37	.43			
	54-70	0-20	1.40-1.70	0.60-2.00	0.34-0.39	0.0-1.0	.20	.24			
	70-80	0-20	1.45-1.75	0.60-2.00	0.34-0.39	0.0-1.0	.24	.28			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
527D: Wakefield-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	3	5	56
	1-4	7-27	1.35-1.55	0.60-2.00	0.49-0.54	0.0-3.0	.28	.32			
	4-7	0-27	1.35-1.55	0.60-2.00	0.54-0.59	0.0-3.0	.37	.43			
	7-10	7-27	1.40-1.70	0.60-2.00	0.49-0.54	0.0-3.0	.28	.32			
	10-16	0-20	1.40-1.70	0.60-2.00	0.37-0.41	0.0-3.0	.24	.24			
	16-26	0-20	1.40-1.70	0.00-0.06	0.10-0.10	0.0-3.0	.24	.28			
	26-54	0-28	1.40-1.70	0.00-0.06	0.10-0.10	0.0-3.0	.37	.43			
	54-70	0-20	1.40-1.70	0.60-2.00	0.34-0.39	0.0-1.0	.20	.24			
	70-80	0-20	1.45-1.75	0.60-2.00	0.34-0.39	0.0-1.0	.24	.28			
528B: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	3	86
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
Annalake-----	0-9	0-20	1.30-1.60	0.60-2.00	0.20-0.22	0.0-3.0	.37	.37	4	3	86
	9-16	0-10	1.40-1.60	0.60-2.00	0.08-0.17	0.0-1.0	.24	.24			
	16-31	0-10	1.40-1.70	0.60-2.00	0.08-0.15	0.0-1.0	.24	.24			
	31-48	0-15	1.35-1.70	0.60-2.00	0.10-0.17	0.0-2.0	.24	.24			
	48-61	0-20	1.35-1.70	0.60-2.00	0.12-0.20	0.0-2.0	.24	.24			
	61-80	0-15	1.60-1.80	0.60-2.00	0.10-0.19	0.0-2.0	.24	.24			
528C: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	3	86
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
Annalake-----	0-9	0-20	1.30-1.60	0.60-2.00	0.20-0.22	0.0-3.0	.37	.37	4	3	86
	9-16	0-10	1.40-1.60	0.60-2.00	0.08-0.17	0.0-1.0	.24	.24			
	16-31	0-10	1.40-1.70	0.60-2.00	0.08-0.15	0.0-1.0	.24	.24			
	31-48	0-15	1.35-1.70	0.60-2.00	0.10-0.17	0.0-2.0	.24	.24			
	48-61	0-20	1.35-1.70	0.60-2.00	0.12-0.20	0.0-2.0	.24	.24			
	61-80	0-15	1.60-1.80	0.60-2.00	0.10-0.19	0.0-2.0	.24	.24			
528D: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
528D: Annalake-----	0-9	0-20	1.30-1.60	0.60-2.00	0.20-0.22	0.0-3.0	.37	.37	4	3	86
	9-16	0-10	1.40-1.60	0.60-2.00	0.08-0.17	0.0-1.0	.24	.24			
	16-31	0-10	1.40-1.70	0.60-2.00	0.08-0.15	0.0-1.0	.24	.24			
	31-48	0-15	1.35-1.70	0.60-2.00	0.10-0.17	0.0-2.0	.24	.24			
	48-61	0-20	1.35-1.70	0.60-2.00	0.12-0.20	0.0-2.0	.24	.24			
	61-80	0-15	1.60-1.80	0.60-2.00	0.10-0.19	0.0-2.0	.24	.24			
551B: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
Dishno-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	4	86
	1-3	1-18	1.30-1.60	0.60-2.00	0.17-0.19	0.0-1.0	.20	.37			
	3-9	1-18	1.30-1.60	0.60-2.00	0.17-0.19	0.0-1.0	.20	.37			
	9-10	1-18	1.35-1.70	0.60-2.00	0.12-0.14	0.0-1.0	.20	.32			
	10-18	0-18	1.35-1.70	0.60-2.00	0.13-0.15	0.0-1.0	.17	.28			
	18-22	0-18	1.35-1.70	0.60-2.00	0.13-0.18	0.0-1.0	.10	.17			
	22-29	0-15	1.50-1.80	2.00-6.00	0.06-0.08	0.0-1.0	.05	.17			
	29-46	0-15	1.50-1.80	2.00-6.00	0.05-0.07	0.0-1.0	.05	.17			
	46-80	---	---	0.00-0.01	---	---	---	---			
566. Beach, rubbly											
576B: Flintsteel-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	5	56
	1-5	25-60	1.20-1.40	0.60-2.00	0.12-0.14	1.0-10.0	.28	.28			
	5-9	5-10	1.45-1.80	0.60-2.00	0.14-0.24	1.0-2.0	.32	.32			
	9-12	9-24	1.45-1.90	0.20-0.60	0.14-0.24	1.0-3.0	.24	.28			
	12-16	10-24	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	16-22	10-27	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	22-36	15-28	1.60-1.85	0.20-0.60	0.14-0.20	1.0-3.0	.32	.43			
	36-48	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.32	.43			
	48-80	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.43	.43			
Loggerhead-----	0-4	2-25	1.30-1.60	0.60-6.00	0.17-0.22	0.0-3.0	.28	.32	5	3	86
	4-5	2-25	1.40-1.70	0.60-6.00	0.14-0.18	0.0-3.0	.20	.24			
	5-15	2-25	1.50-1.80	0.60-6.00	0.15-0.19	0.0-3.0	.28	.32			
	15-38	2-25	1.60-1.80	0.60-2.00	0.13-0.17	0.0-3.0	.20	.24			
	38-56	5-25	1.60-1.90	0.20-0.60	0.14-0.17	0.0-3.0	.20	.24			
	56-80	10-35	1.60-1.90	0.20-0.60	0.16-0.19	0.0-3.0	.32	.32			
576C: Flintsteel-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	5	56
	1-5	25-60	1.20-1.40	0.60-2.00	0.12-0.14	1.0-10.0	.28	.28			
	5-9	5-10	1.45-1.80	0.60-2.00	0.14-0.24	1.0-2.0	.32	.32			
	9-12	9-24	1.45-1.90	0.20-0.60	0.14-0.24	1.0-3.0	.24	.28			
	12-16	10-24	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	16-22	10-27	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	22-36	15-28	1.60-1.85	0.20-0.60	0.14-0.20	1.0-3.0	.32	.43			
	36-48	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.32	.43			
	48-80	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.43	.43			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
576C:											
Loggerhead-----	0-4	2-25	1.30-1.60	0.60-2.00	0.17-0.22	0.0-3.0	.28	.32	5	3	86
	4-5	2-25	1.40-1.70	0.60-2.00	0.14-0.18	0.0-3.0	.20	.24			
	5-15	2-25	1.50-1.80	0.60-2.00	0.15-0.19	0.0-3.0	.28	.32			
	15-38	2-25	1.60-1.80	0.60-2.00	0.13-0.17	0.0-3.0	.20	.24			
	38-56	5-25	1.60-1.90	0.20-0.60	0.14-0.17	0.0-3.0	.20	.24			
	56-80	10-35	1.60-1.90	0.20-0.60	0.16-0.19	0.0-3.0	.32	.32			
576D:											
Flintsteel-----	0-1	---	0.05-0.15	6.00-20.00	0.55-0.65	---	---	---	5	5	56
	1-5	25-60	1.20-1.40	0.60-2.00	0.12-0.14	1.0-10.0	.28	.28			
	5-9	5-10	1.45-1.80	0.60-2.00	0.14-0.24	1.0-2.0	.32	.32			
	9-12	9-24	1.45-1.90	0.20-0.60	0.14-0.24	1.0-3.0	.24	.28			
	12-16	10-24	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	16-22	10-27	1.50-1.90	0.20-0.60	0.13-0.22	1.0-3.0	.37	.37			
	22-36	15-28	1.60-1.85	0.20-0.60	0.14-0.20	1.0-3.0	.32	.43			
	36-48	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.32	.43			
	48-80	10-20	1.75-1.95	0.00-0.06	0.05-0.20	1.0-3.0	.43	.43			
Loggerhead-----	0-4	2-25	1.30-1.60	0.60-2.00	0.17-0.22	0.0-3.0	.28	.32	5	3	86
	4-5	2-25	1.40-1.70	0.60-2.00	0.14-0.18	0.0-3.0	.20	.24			
	5-15	2-25	1.50-1.80	0.60-2.00	0.15-0.19	0.0-3.0	.28	.32			
	15-38	2-25	1.60-1.80	0.60-2.00	0.13-0.17	0.0-3.0	.20	.24			
	38-56	5-25	1.60-1.90	0.20-0.60	0.14-0.17	0.0-3.0	.20	.24			
	56-80	10-35	1.60-1.90	0.20-0.60	0.16-0.19	0.0-3.0	.32	.32			
577B:											
Loggerhead-----	0-4	2-25	1.30-1.60	0.60-2.00	0.17-0.22	0.0-3.0	.28	.32	5	3	86
	4-5	2-25	1.40-1.70	0.60-2.00	0.14-0.18	0.0-3.0	.20	.24			
	5-15	2-25	1.50-1.80	0.60-2.00	0.15-0.19	0.0-3.0	.28	.32			
	15-38	2-25	1.60-1.80	0.60-2.00	0.13-0.17	0.0-3.0	.20	.24			
	38-56	5-25	1.60-1.90	0.20-0.60	0.14-0.17	0.0-3.0	.20	.24			
	56-80	10-35	1.60-1.90	0.20-0.60	0.16-0.19	0.0-3.0	.32	.32			
Chabeneau-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	5	5	56
	1-2	1-8	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37			
	2-5	1-8	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37			
	5-10	1-8	1.35-1.55	0.60-2.00	0.15-0.22	0.0-2.9	.32	.24			
	10-22	1-8	1.35-1.55	0.60-2.00	0.15-0.22	0.0-2.9	.32	.24			
	22-30	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
	30-48	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
	48-121	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
Arcadian-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	2	8	0
	2-5	4-15	1.30-1.60	0.60-2.00	0.06-0.11	0.0-2.9	.17	.24			
	5-12	4-18	1.35-1.70	0.60-2.00	0.06-0.11	0.0-2.9	.17	.24			
	12-22	---	---	0.00-0.01	---	---	---	---			
577C:											
Loggerhead-----	0-4	2-25	1.30-1.60	0.60-2.00	0.17-0.22	0.0-3.0	.28	.32	5	3	86
	4-5	2-25	1.40-1.70	0.60-2.00	0.14-0.18	0.0-3.0	.20	.24			
	5-15	2-25	1.50-1.80	0.60-2.00	0.15-0.19	0.0-3.0	.28	.32			
	15-38	2-25	1.60-1.80	0.60-2.00	0.13-0.17	0.0-3.0	.20	.24			
	38-56	5-25	1.60-1.90	0.20-0.60	0.14-0.17	0.0-3.0	.20	.24			
	56-80	10-35	1.60-1.90	0.20-0.60	0.16-0.19	0.0-3.0	.32	.32			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
577C:											
Chabeneau-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	5	5	56
	1-2	1-8	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37			
	2-5	1-8	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37			
	5-10	1-8	1.35-1.55	0.60-2.00	0.15-0.22	0.0-2.9	.32	.24			
	10-22	1-8	1.35-1.55	0.60-2.00	0.15-0.22	0.0-2.9	.32	.24			
	22-30	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
	30-48	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
	48-121	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
Arcadian-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	2	8	0
	2-5	4-15	1.30-1.60	0.60-2.00	0.06-0.11	0.0-2.9	.17	.24			
	5-12	4-18	1.35-1.70	0.60-2.00	0.06-0.11	0.0-2.9	.17	.24			
	12-22	---	---	0.00-0.01	---	---	---	---			
577D:											
Loggerhead-----	0-4	2-25	1.30-1.60	0.60-2.00	0.17-0.22	0.0-3.0	.28	.32	5	3	86
	4-5	2-25	1.40-1.70	0.60-2.00	0.14-0.18	0.0-3.0	.20	.24			
	5-15	2-25	1.50-1.80	0.60-2.00	0.15-0.19	0.0-3.0	.28	.32			
	15-38	2-25	1.60-1.80	0.60-2.00	0.13-0.17	0.0-3.0	.20	.24			
	38-56	5-25	1.60-1.90	0.20-0.60	0.14-0.17	0.0-3.0	.20	.24			
	56-80	10-35	1.60-1.90	0.20-0.60	0.16-0.19	0.0-3.0	.32	.32			
Chabeneau-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	5	5	56
	1-2	1-8	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37			
	2-5	1-8	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37			
	5-10	1-8	1.35-1.55	0.60-2.00	0.15-0.22	0.0-2.9	.32	.24			
	10-22	1-8	1.35-1.55	0.60-2.00	0.15-0.22	0.0-2.9	.32	.24			
	22-30	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
	30-48	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
	48-121	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
Arcadian-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	2	8	0
	2-5	4-15	1.30-1.60	0.60-2.00	0.06-0.11	0.0-2.9	.17	.24			
	5-12	4-18	1.35-1.70	0.60-2.00	0.06-0.11	0.0-2.9	.17	.24			
	12-22	---	---	0.00-0.01	---	---	---	---			
578D:											
Arcadian-----	0-2	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	2	8	0
	2-5	4-15	1.30-1.60	0.60-2.00	0.06-0.11	0.0-2.9	.17	.24			
	5-12	4-18	1.35-1.70	0.60-2.00	0.06-0.11	0.0-2.9	.17	.24			
	12-22	---	---	0.00-0.01	---	---	---	---			
Keweenaw-----	0-2	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	5	2	134
	2-4	0-57	1.45-1.65	0.60-6.00	0.09-0.13	0.0-2.9	.17	.17			
	4-6	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	6-25	0-10	1.30-1.70	0.60-2.00	0.05-0.11	---	.10	.17			
	25-45	0-10	1.30-1.80	0.60-2.00	0.03-0.10	---	.15	.15			
	45-56	0-10	1.30-1.80	0.60-2.00	0.05-0.08	---	.15	.15			
	56-71	0-10	1.30-1.80	0.60-2.00	0.03-0.07	---	.15	.15			
	71-90	0-10	1.55-1.80	0.60-2.00	0.05-0.16	---	.20	.24			
625B:											
Fence-----	0-6	2-8	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37	5	5	56
	6-7	5-20	1.35-1.55	0.60-2.00	0.18-0.22	0.0-2.9	.37	.37			
	7-13	5-20	1.50-1.65	0.60-2.00	0.16-0.22	0.0-2.9	.43	.43			
	13-15	5-20	1.50-1.65	0.60-2.00	0.16-0.22	0.0-2.9	.43	.43			
	15-20	6-20	1.50-1.65	0.60-2.00	0.16-0.22	0.0-2.9	.43	.43			
	20-35	8-20	1.50-1.65	0.60-2.00	0.18-0.22	0.0-2.9	.43	.43			
	35-80	5-20	1.50-1.65	0.20-0.60	0.18-0.22	0.0-2.9	.43	.43			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
625C: Fence-----	0-6	2-8	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37	5	5	56
	6-7	5-20	1.35-1.55	0.60-2.00	0.18-0.22	0.0-2.9	.37	.37			
	7-13	5-20	1.50-1.65	0.60-2.00	0.16-0.22	0.0-2.9	.43	.43			
	13-15	5-20	1.50-1.65	0.60-2.00	0.16-0.22	0.0-2.9	.43	.43			
	15-20	6-20	1.50-1.65	0.60-2.00	0.16-0.22	0.0-2.9	.43	.43			
	20-35	8-20	1.50-1.65	0.60-2.00	0.18-0.22	0.0-2.9	.43	.43			
	35-80	5-20	1.50-1.65	0.20-0.60	0.18-0.22	0.0-2.9	.43	.43			
626D: Sporley-----	0-6	2-8	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37	5	5	56
	6-7	0-15	1.35-1.55	0.20-0.60	0.22-0.24	0.0-3.0	.37	.37			
	7-12	0-15	1.40-1.70	0.20-0.60	0.20-0.22	0.0-3.0	.43	.43			
	12-15	0-15	1.35-1.55	0.20-0.60	0.22-0.24	0.0-3.0	.37	.37			
	15-24	1-25	1.40-1.70	0.20-0.60	0.20-0.22	0.0-3.0	.43	.43			
	24-30	15-35	1.40-1.70	0.20-0.60	0.18-0.22	0.0-3.0	.43	.43			
	30-80	0-25	1.45-1.75	0.20-0.60	0.18-0.22	0.0-3.0	.43	.43			
626E: Sporley-----	0-6	2-8	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37	5	5	56
	6-7	0-15	1.35-1.55	0.20-0.60	0.22-0.24	0.0-3.0	.37	.37			
	7-12	0-15	1.40-1.70	0.20-0.60	0.20-0.22	0.0-3.0	.43	.43			
	12-15	0-15	1.35-1.55	0.20-0.60	0.22-0.24	0.0-3.0	.37	.37			
	15-24	1-25	1.40-1.70	0.20-0.60	0.20-0.22	0.0-3.0	.43	.43			
	24-30	15-35	1.40-1.70	0.20-0.60	0.18-0.22	0.0-3.0	.43	.43			
	30-80	0-25	1.45-1.75	0.20-0.60	0.18-0.22	0.0-3.0	.43	.43			
648B: Annalake-----	0-9	0-20	1.30-1.60	0.60-2.00	0.20-0.22	0.0-3.0	.37	.37	4	3	86
	9-16	0-10	1.40-1.60	0.60-2.00	0.08-0.17	0.0-1.0	.24	.24			
	16-31	0-10	1.40-1.70	0.60-2.00	0.08-0.15	0.0-1.0	.24	.24			
	31-48	0-15	1.35-1.70	0.60-2.00	0.10-0.17	0.0-2.0	.24	.24			
	48-61	0-20	1.35-1.70	0.60-2.00	0.12-0.20	0.0-2.0	.24	.24			
	61-80	0-15	1.60-1.80	0.60-2.00	0.10-0.19	0.0-2.0	.24	.24			
648C: Annalake-----	0-9	0-20	1.30-1.60	0.60-2.00	0.20-0.22	0.0-3.0	.37	.37	4	3	86
	9-16	0-10	1.40-1.60	0.60-2.00	0.08-0.17	0.0-1.0	.24	.24			
	16-31	0-10	1.40-1.70	0.60-2.00	0.08-0.15	0.0-1.0	.24	.24			
	31-48	0-15	1.35-1.70	0.60-2.00	0.10-0.17	0.0-2.0	.24	.24			
	48-61	0-20	1.35-1.70	0.60-2.00	0.12-0.20	0.0-2.0	.24	.24			
	61-80	0-15	1.60-1.80	0.60-2.00	0.10-0.19	0.0-2.0	.24	.24			
650: Leafriver-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	3	2	134
	1-14	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	14-16	0-20	1.50-1.70	6.00-20.00	0.09-0.11	0.0-3.0	.15	.17			
	16-51	0-15	1.50-1.70	6.00-20.00	0.02-0.03	0.0-3.0	.10	.15			
652B: Manido-----	0-3	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	2	1	220
	3-9	0-10	1.30-1.55	6.00-20.00	0.07-0.09	0.0-0.5	.15	.15			
	9-11	0-10	1.40-1.65	6.00-20.00	0.06-0.09	0.0-0.5	.15	.15			
	11-17	0-10	1.40-1.65	6.00-20.00	0.06-0.09	0.0-0.5	.15	.15			
	17-37	0-10	1.40-1.65	6.00-20.00	0.06-0.09	0.0-0.5	.15	.15			
	37-60	0-10	1.40-1.65	6.00-20.00	0.06-0.09	0.0-0.5	.15	.15			
	60-80	0-10	1.55-1.65	6.00-20.00	0.05-0.10	0.0-0.5	.15	.15			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
652B:											
Annalake-----	0-9	0-20	1.30-1.60	0.60-2.00	0.20-0.22	0.0-3.0	.37	.37	4	3	86
	9-16	0-10	1.40-1.60	0.60-2.00	0.08-0.17	0.0-1.0	.24	.24			
	16-31	0-10	1.40-1.70	0.60-2.00	0.08-0.15	0.0-1.0	.24	.24			
	31-48	0-15	1.35-1.70	0.60-2.00	0.10-0.17	0.0-2.0	.24	.24			
	48-61	0-20	1.35-1.70	0.60-2.00	0.12-0.20	0.0-2.0	.24	.24			
	61-80	0-15	1.60-1.80	0.60-2.00	0.10-0.19	0.0-2.0	.24	.24			
656B:											
Stutts-----	0-1	---	0.10-0.20	0.20-6.00	0.45-0.55	---	---	---	3	2	134
	1-6	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	6-8	0-15	1.35-1.70	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	8-15	0-15	1.30-1.70	2.00-20.00	0.06-0.08	0.0-1.0	.17	.17			
	15-18	0-10	1.30-1.70	2.00-20.00	0.06-0.08	0.0-1.0	.15	.15			
	18-28	0-4	1.30-1.70	2.00-20.00	0.06-0.08	---	.15	.15			
Zandi-----	28-80	0-4	1.55-1.75	2.00-20.00	0.05-0.07	---	.15	.15			
	0-0.5	---	0.10-0.20	2.00-6.00	0.45-0.55	---	---	---	5	2	134
	0.5-4	0-14	1.30-1.60	0.60-2.00	0.10-0.12	---	.24	.24			
	4-6	0-14	1.35-1.70	0.60-2.00	0.09-0.11	---	.24	.24			
	6-34	0-18	1.35-1.70	0.60-2.00	0.13-0.15	---	.24	.24			
	34-42	0-20	1.35-1.70	0.60-2.00	0.12-0.20	---	.24	.24			
656C:	42-57	0-14	1.35-1.70	0.60-2.00	0.10-0.18	---	.37	.37			
	57-80	0-14	1.35-1.70	0.60-2.00	0.10-0.18	---	.37	.37			
	0-1	---	0.10-0.20	0.20-6.00	0.45-0.55	---	---	---	3	2	134
	1-6	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	6-8	0-15	1.35-1.70	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	8-15	0-15	1.30-1.70	2.00-20.00	0.06-0.08	0.0-1.0	.17	.17			
Zandi-----	15-18	0-10	1.30-1.70	2.00-20.00	0.06-0.08	0.0-1.0	.15	.15			
	18-28	0-4	1.30-1.70	2.00-20.00	0.06-0.08	---	.15	.15			
	28-80	0-4	1.55-1.75	2.00-20.00	0.05-0.07	---	.15	.15			
	0-0.5	---	0.10-0.20	2.00-6.00	0.45-0.55	---	---	---	5	2	134
	0.5-4	0-14	1.30-1.60	0.60-2.00	0.10-0.12	---	.24	.24			
	4-6	0-14	1.35-1.70	0.60-2.00	0.09-0.11	---	.24	.24			
656D:	6-34	0-18	1.35-1.70	0.60-2.00	0.13-0.15	---	.24	.24			
	34-42	0-20	1.35-1.70	0.60-2.00	0.12-0.20	---	.24	.24			
	42-57	0-14	1.35-1.70	0.60-2.00	0.10-0.18	---	.37	.37			
	57-80	0-14	1.35-1.70	0.60-2.00	0.10-0.18	---	.37	.37			
	0-1	---	0.10-0.20	0.20-6.00	0.45-0.55	---	---	---	3	2	134
	1-6	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
Zandi-----	6-8	0-15	1.35-1.70	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	8-15	0-15	1.30-1.70	2.00-20.00	0.06-0.08	0.0-1.0	.17	.17			
	15-18	0-10	1.30-1.70	2.00-20.00	0.06-0.08	0.0-1.0	.15	.15			
	18-28	0-4	1.30-1.70	2.00-20.00	0.06-0.08	---	.15	.15			
	28-80	0-4	1.55-1.75	2.00-20.00	0.05-0.07	---	.15	.15			
	0-0.5	---	0.10-0.20	2.00-6.00	0.45-0.55	---	---	---	2	2	134
656D:	0.5-4	0-14	1.30-1.60	0.60-2.00	0.10-0.12	---	.24	.24			
	4-6	0-14	1.35-1.70	0.60-2.00	0.09-0.11	---	.24	.24			
	6-34	0-18	1.35-1.70	0.60-2.00	0.13-0.15	---	.24	.24			
	34-42	0-20	1.35-1.70	0.60-2.00	0.12-0.20	---	.24	.24			
	42-57	0-14	1.35-1.70	0.60-2.00	0.10-0.18	---	.37	.37			
	57-80	0-14	1.35-1.70	0.60-2.00	0.10-0.18	---	.37	.37			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
680B:											
Tonkey-----	0-6	7-25	1.10-1.35	0.60-2.00	0.22-0.24	0.0-3.0	.32	.32	5	7	38
	6-9	7-25	1.10-1.35	0.60-2.00	0.22-0.24	0.0-3.0	.32	.32			
	9-18	5-25	1.50-1.85	0.60-2.00	0.12-0.14	0.0-3.0	.24	.24			
	18-28	5-25	1.50-1.85	0.60-2.00	0.12-0.14	0.0-3.0	.24	.24			
	28-37	5-20	1.50-1.85	0.60-2.00	0.12-0.14	0.0-3.0	.28	.28			
	37-67	5-20	1.70-1.80	0.60-2.00	0.14-0.16	0.0-3.0	.24	.24			
	67-80	5-20	1.70-1.80	0.60-2.00	0.14-0.16	0.0-3.0	.24	.24			
Pleine-----	0-9	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	5	8	0
	9-20	5-15	1.10-1.35	0.60-2.00	0.16-0.22	0.0-2.9	.24	.28			
	20-33	5-15	1.50-1.85	0.60-2.00	0.15-0.19	0.0-2.9	.24	.28			
	33-80	5-15	1.55-1.70	0.60-2.00	0.11-0.16	0.0-2.9	.24	.28			
Annalake-----	0-9	0-20	1.30-1.60	0.60-2.00	0.20-0.22	0.0-3.0	.37	.37	4	3	86
	9-16	0-10	1.40-1.60	0.60-2.00	0.08-0.17	0.0-1.0	.24	.24			
	16-31	0-10	1.40-1.70	0.60-2.00	0.08-0.15	0.0-1.0	.24	.24			
	31-48	0-15	1.35-1.70	0.60-2.00	0.10-0.17	0.0-2.0	.24	.24			
	48-61	0-20	1.35-1.70	0.60-2.00	0.12-0.20	0.0-2.0	.24	.24			
	61-80	0-15	1.60-1.80	0.60-2.00	0.10-0.19	0.0-2.0	.24	.24			
681:											
Cathro-----	0-6	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	5	2	134
	6-31	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	31-80	5-30	1.70-1.80	0.20-2.00	0.10-0.22	0.0-3.0	.20	.28			
Tonkey-----	0-6	7-25	1.10-1.35	0.60-2.00	0.22-0.24	0.0-3.0	.32	.32	5	7	38
	6-9	7-25	1.10-1.35	0.60-2.00	0.22-0.24	0.0-3.0	.32	.32			
	9-18	5-25	1.50-1.85	0.60-2.00	0.12-0.14	0.0-3.0	.24	.24			
	18-28	5-25	1.50-1.85	0.60-2.00	0.12-0.14	0.0-3.0	.24	.24			
	28-37	5-20	1.50-1.85	0.60-2.00	0.12-0.14	0.0-3.0	.28	.28			
	37-67	5-20	1.70-1.80	0.60-2.00	0.14-0.16	0.0-3.0	.24	.24			
	67-80	5-20	1.70-1.80	0.60-2.00	0.14-0.16	0.0-3.0	.24	.24			
683B:											
Amasa-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-4	0-28	1.30-1.60	0.60-2.00	0.18-0.19	0.0-3.0	.24	.37			
	4-7	0-28	1.35-1.70	0.60-2.00	0.21-0.23	0.0-3.0	.37	.43			
	7-23	15-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.37	.43			
	23-28	15-20	1.35-1.70	0.60-2.00	0.14-0.15	0.0-3.0	.17	.24			
	28-41	0-10	1.55-1.65	6.00-20.00	0.05-0.06	0.0-3.0	.10	.15			
	41-80	0-10	1.55-1.65	6.00-20.00	0.03-0.04	0.0-3.0	.05	.15			
Oldman-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-3	5-15	1.30-1.60	2.00-6.00	0.06-0.21	0.0-3.0	.20	.32			
	3-23	5-15	1.35-1.70	2.00-6.00	0.05-0.20	0.0-3.0	.15	.37			
	23-28	1-10	1.80-2.15	0.00-0.06	0.03-0.13	0.0-1.0	.10	.28			
	28-43	1-10	1.80-2.15	0.00-0.06	0.03-0.13	0.0-1.0	.10	.28			
	43-58	1-10	1.80-2.15	0.20-0.60	0.03-0.13	0.0-1.0	.05	.17			
	58-80	1-10	1.80-2.15	0.20-0.60	0.03-0.13	0.0-1.0	.15	.17			
683C:											
Amasa-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-4	0-28	1.30-1.60	0.60-2.00	0.18-0.19	0.0-3.0	.24	.37			
	4-7	0-28	1.35-1.70	0.60-2.00	0.21-0.23	0.0-3.0	.37	.43			
	7-23	15-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.37	.43			
	23-28	15-20	1.35-1.70	0.60-2.00	0.14-0.15	0.0-3.0	.17	.24			
	28-41	0-10	1.55-1.65	6.00-20.00	0.05-0.06	0.0-3.0	.10	.15			
	41-80	0-10	1.55-1.65	6.00-20.00	0.03-0.04	0.0-3.0	.05	.15			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
683C: Oldman-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-3	5-15	1.30-1.60	2.00-6.00	0.06-0.21	0.0-3.0	.20	.32			
	3-23	5-15	1.35-1.70	2.00-6.00	0.05-0.20	0.0-3.0	.15	.37			
	23-28	1-10	1.80-2.15	0.00-0.06	0.03-0.13	0.0-1.0	.10	.28			
	28-43	1-10	1.80-2.15	0.00-0.06	0.03-0.13	0.0-1.0	.10	.28			
	43-58	1-10	1.80-2.15	0.20-0.60	0.03-0.13	0.0-1.0	.05	.17			
	58-80	1-10	1.80-2.15	0.20-0.60	0.03-0.13	0.0-1.0	.15	.17			
683D: Amasa-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-4	0-28	1.30-1.60	0.60-2.00	0.18-0.19	0.0-3.0	.24	.37			
	4-7	0-28	1.35-1.70	0.60-2.00	0.21-0.23	0.0-3.0	.37	.43			
	7-23	15-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.37	.43			
	23-28	15-20	1.35-1.70	0.60-2.00	0.14-0.15	0.0-3.0	.17	.24			
	28-41	0-10	1.55-1.65	6.00-20.00	0.05-0.06	0.0-3.0	.10	.15			
	41-80	0-10	1.55-1.65	6.00-20.00	0.03-0.04	0.0-3.0	.05	.15			
Oldman-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-3	5-15	1.30-1.60	2.00-6.00	0.06-0.21	0.0-3.0	.20	.32			
	3-23	5-15	1.35-1.70	2.00-6.00	0.05-0.20	0.0-3.0	.15	.37			
	23-28	1-10	1.80-2.15	0.00-0.06	0.03-0.13	0.0-1.0	.10	.28			
	28-43	1-10	1.80-2.15	0.00-0.06	0.03-0.13	0.0-1.0	.10	.28			
	43-58	1-10	1.80-2.15	0.20-0.60	0.03-0.13	0.0-1.0	.05	.17			
	58-80	1-10	1.80-2.15	0.20-0.60	0.03-0.13	0.0-1.0	.15	.17			
684B: Amasa-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-4	15-20	1.30-1.60	0.60-2.00	0.13-0.14	0.0-3.0	.15	.24			
	4-7	3-20	1.35-1.70	0.60-2.00	0.21-0.23	0.0-2.0	.37	.43			
	7-23	1-15	1.35-1.70	0.60-2.00	0.16-0.18	0.0-1.0	.37	.43			
	23-28	1-15	1.35-1.70	0.60-2.00	0.14-0.15	0.0-1.0	.17	.24			
	28-41	0-5	1.55-1.65	6.00-20.00	0.05-0.06	---	.10	.15			
	41-80	0-5	1.55-1.65	6.00-20.00	0.03-0.04	---	.05	.15			
684C: Amasa-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-4	15-20	1.30-1.60	0.60-2.00	0.13-0.14	0.0-3.0	.15	.24			
	4-7	0-28	1.35-1.70	0.60-2.00	0.21-0.23	0.0-3.0	.37	.43			
	7-23	15-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.37	.43			
	23-28	15-20	1.35-1.70	0.60-2.00	0.14-0.15	0.0-3.0	.17	.24			
	28-41	0-10	1.55-1.65	6.00-20.00	0.05-0.06	0.0-3.0	.10	.15			
	41-80	0-10	1.55-1.65	6.00-20.00	0.03-0.04	0.0-3.0	.05	.15			
684D: Amasa-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	5	56
	1-4	15-20	1.30-1.60	0.60-2.00	0.13-0.14	0.0-3.0	.15	.24			
	4-7	0-28	1.35-1.70	0.60-2.00	0.21-0.23	0.0-3.0	.37	.43			
	7-23	15-20	1.35-1.70	0.60-2.00	0.16-0.18	0.0-3.0	.37	.43			
	23-28	15-20	1.35-1.70	0.60-2.00	0.14-0.15	0.0-3.0	.17	.24			
	28-41	0-10	1.55-1.65	6.00-20.00	0.05-0.06	0.0-3.0	.10	.15			
	41-80	0-10	1.55-1.65	6.00-20.00	0.03-0.04	0.0-3.0	.05	.15			
686B: Annalake-----	0-9	0-20	1.30-1.60	0.60-2.00	0.20-0.22	0.0-3.0	.37	.37	4	3	86
	9-16	0-10	1.40-1.60	0.60-2.00	0.08-0.17	0.0-1.0	.24	.24			
	16-31	0-10	1.40-1.70	0.60-2.00	0.08-0.15	0.0-1.0	.24	.24			
	31-48	0-15	1.35-1.70	0.60-2.00	0.10-0.17	0.0-2.0	.24	.24			
	48-61	0-20	1.35-1.70	0.60-2.00	0.12-0.20	0.0-2.0	.24	.24			
	61-80	0-15	1.60-1.80	0.60-2.00	0.10-0.19	0.0-2.0	.24	.24			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
686B:											
Robago-----	0-6	7-19	1.20-1.50	0.60-2.00	0.13-0.15	0.0-3.0	.37	.37	5	3	86
	6-9	7-19	1.20-1.50	0.60-2.00	0.13-0.15	0.0-3.0	.37	.37			
	9-15	7-25	1.35-1.60	0.60-2.00	0.12-0.14	0.0-3.0	.24	.24			
	15-22	7-35	1.35-1.60	0.60-2.00	0.12-0.14	0.0-3.0	.24	.24			
	22-39	7-35	1.35-1.60	0.60-2.00	0.12-0.14	0.0-3.0	.24	.24			
	39-80	7-35	1.55-1.70	0.60-2.00	0.11-0.13	0.0-3.0	.24	.24			
688:											
Cathro-----	0-6	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	5	2	134
	6-31	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	31-80	5-30	1.70-1.80	0.20-2.00	0.10-0.22	0.0-3.0	.20	.28			
Leafriver-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	3	2	134
	1-14	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	14-16	0-20	1.50-1.70	6.00-20.00	0.09-0.11	0.0-3.0	.15	.17			
	16-51	0-15	1.50-1.70	6.00-20.00	0.02-0.03	0.0-3.0	.10	.15			
689B:											
Chabeneau-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	5	5	56
	1-2	1-8	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37			
	2-5	1-8	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37			
	5-10	1-8	1.35-1.55	0.60-2.00	0.15-0.22	0.0-2.9	.32	.24			
	10-22	1-8	1.35-1.55	0.60-2.00	0.15-0.22	0.0-2.9	.32	.24			
	22-30	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
	30-48	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
	48-121	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
Channing-----	0-2	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	3	86
	2-6	2-12	1.10-1.35	0.60-2.00	0.07-0.18	0.0-2.9	.17	.24			
	6-7	2-12	1.10-1.35	0.60-2.00	0.07-0.18	0.0-2.9	.17	.24			
	7-16	2-15	1.25-1.70	0.60-2.00	0.09-0.19	0.0-2.9	.24	.32			
	16-24	2-15	1.25-1.70	0.60-2.00	0.09-0.19	0.0-2.9	.24	.32			
	24-29	0-5	1.50-1.65	20.00-99.90	0.02-0.04	0.0-2.9	.10	.15			
	29-62	0-5	1.50-1.65	20.00-99.90	0.02-0.04	0.0-2.9	.10	.15			
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	1-18	1.60-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
691B:											
Dishno-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	4	86
	1-3	1-18	1.30-1.60	0.60-2.00	0.17-0.19	0.0-1.0	.20	.37			
	3-9	1-18	1.30-1.60	0.60-2.00	0.17-0.19	0.0-1.0	.20	.37			
	9-10	1-18	1.35-1.70	0.60-2.00	0.12-0.14	0.0-1.0	.20	.32			
	10-18	0-18	1.35-1.70	0.60-2.00	0.13-0.15	0.0-1.0	.17	.28			
	18-22	0-18	1.35-1.70	0.60-2.00	0.13-0.18	0.0-1.0	.10	.17			
	22-29	0-15	1.50-1.80	2.00-6.00	0.06-0.08	0.0-1.0	.05	.17			
	29-46	0-15	1.50-1.80	2.00-6.00	0.05-0.07	0.0-1.0	.05	.17			
	46-80	---	---	0.00-0.01	---	---	---	---			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
691B:											
Tula-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-5	2-18	1.20-1.50	0.60-2.00	0.10-0.20	0.0-3.0	.15	.28			
	5-8	2-18	1.20-1.50	0.60-2.00	0.10-0.20	0.0-3.0	.15	.28			
	8-20	2-18	1.35-1.60	0.60-2.00	0.10-0.18	0.0-3.0	.15	.28			
	20-28	2-18	1.35-1.60	0.60-2.00	0.08-0.15	0.0-3.0	.15	.28			
	28-37	2-18	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.15	.28			
	37-62	2-20	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.24	.37			
	62-80	2-18	1.55-1.70	0.60-2.00	0.07-0.14	0.0-3.0	.15	.15			
Rock outcrop.											
691D:											
Dishno-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	4	4	86
	1-3	1-18	1.30-1.60	0.60-2.00	0.17-0.19	0.0-1.0	.20	.37			
	3-9	1-18	1.30-1.60	0.60-2.00	0.17-0.19	0.0-1.0	.20	.37			
	9-10	1-18	1.35-1.70	0.60-2.00	0.12-0.14	0.0-1.0	.20	.32			
	10-18	0-18	1.35-1.70	0.60-2.00	0.13-0.15	0.0-1.0	.17	.28			
	18-22	0-18	1.35-1.70	0.60-2.00	0.13-0.18	0.0-1.0	.10	.17			
	22-29	0-15	1.50-1.80	2.00-6.00	0.06-0.08	0.0-1.0	.05	.17			
	29-46	0-15	1.50-1.80	2.00-6.00	0.05-0.07	0.0-1.0	.05	.17			
	46-80	---	---	0.00-0.01	---	---	---	---			
Tula-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	4	3	86
	1-5	2-18	1.20-1.50	0.60-2.00	0.10-0.20	0.0-3.0	.15	.28			
	5-8	2-18	1.20-1.50	0.60-2.00	0.10-0.20	0.0-3.0	.15	.28			
	8-20	2-18	1.35-1.60	0.60-2.00	0.10-0.18	0.0-3.0	.15	.28			
	20-28	2-18	1.35-1.60	0.60-2.00	0.08-0.15	0.0-3.0	.15	.28			
	28-37	2-18	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.15	.28			
	37-62	2-20	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.24	.37			
	62-80	2-18	1.55-1.70	0.60-2.00	0.07-0.14	0.0-3.0	.15	.15			
Rock outcrop.											
693B:											
Chabeneau-----	0-1	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	5	5	56
	1-2	1-8	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37			
	2-5	1-8	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	.37	.37			
	5-10	1-8	1.35-1.55	0.60-2.00	0.15-0.22	0.0-2.9	.32	.24			
	10-22	1-8	1.35-1.55	0.60-2.00	0.15-0.22	0.0-2.9	.32	.24			
	22-30	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
	30-48	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
	48-121	0-2	1.50-1.60	20.00-28.34	0.02-0.04	0.0-2.9	.10	.10			
Annalake-----	0-9	0-20	1.30-1.60	0.60-2.00	0.20-0.22	0.0-3.0	.37	.37	4	3	86
	9-16	0-10	1.40-1.60	0.60-2.00	0.08-0.17	0.0-1.0	.24	.24			
	16-31	0-10	1.40-1.70	0.60-2.00	0.08-0.15	0.0-1.0	.24	.24			
	31-48	0-15	1.35-1.70	0.60-2.00	0.10-0.17	0.0-2.0	.24	.24			
	48-61	0-20	1.35-1.70	0.60-2.00	0.12-0.20	0.0-2.0	.24	.24			
	61-80	0-15	1.60-1.80	0.60-2.00	0.10-0.19	0.0-2.0	.24	.24			
694D:											
Annalake-----	0-9	0-20	1.30-1.60	0.60-2.00	0.20-0.22	0.0-3.0	.37	.37	4	3	86
	9-16	0-10	1.40-1.60	0.60-2.00	0.08-0.17	0.0-1.0	.24	.24			
	16-31	0-10	1.40-1.70	0.60-2.00	0.08-0.15	0.0-1.0	.24	.24			
	31-48	0-15	1.35-1.70	0.60-2.00	0.10-0.17	0.0-2.0	.24	.24			
	48-61	0-20	1.35-1.70	0.60-2.00	0.12-0.20	0.0-2.0	.24	.24			
	61-80	0-15	1.60-1.80	0.60-2.00	0.10-0.19	0.0-2.0	.24	.24			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
694D:											
Stutts-----	0-1	---	0.10-0.20	0.20-6.00	0.45-0.55	---	---	---	3	2	134
	1-6	0-15	1.35-1.65	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	6-8	0-15	1.35-1.70	2.00-6.00	0.10-0.12	0.0-1.0	.17	.17			
	8-15	0-15	1.30-1.70	2.00-20.00	0.06-0.08	0.0-1.0	.17	.17			
	15-18	0-10	1.30-1.70	2.00-20.00	0.06-0.08	0.0-1.0	.15	.15			
	18-28	0-4	1.30-1.70	2.00-20.00	0.06-0.08	---	.15	.15			
	28-80	0-4	1.55-1.75	2.00-20.00	0.05-0.07	---	.15	.15			
Arnheim-----	0-5	12-18	1.15-1.60	0.60-2.00	0.12-0.35	0.0-2.9	.37	.37	5	8	0
	5-10	5-18	1.50-1.80	0.60-2.00	0.09-0.22	0.0-2.9	.37	.37			
	10-80	4-14	1.46-1.80	0.60-2.00	0.08-0.22	0.0-3.0	.37	.37			
5170:											
Minocqua-----	0-4	---	0.15-0.45	2.00-6.00	0.35-0.45	---	.02	.02	4	8	0
	4-15	10-17	1.50-1.60	0.60-2.00	0.11-0.19	0.0-2.9	.37	.37			
	15-28	7-17	1.40-1.70	0.60-2.00	0.06-0.19	0.0-2.9	.32	.32			
	28-60	0-5	1.55-1.80	6.00-20.00	0.01-0.07	0.0-2.9	.10	.15			
Pleine-----	0-9	---	0.20-0.30	6.00-20.00	0.35-0.45	---	---	---	5	8	0
	9-20	5-15	1.10-1.35	0.60-2.00	0.16-0.22	0.0-2.9	.24	.28			
	20-33	5-15	1.50-1.85	0.60-2.00	0.15-0.19	0.0-2.9	.24	.28			
	33-80	5-15	1.55-1.70	0.60-2.00	0.11-0.16	0.0-2.9	.24	.28			
Cathro-----	0-6	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	2	8	0
	6-31	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	31-80	5-30	1.70-1.80	0.20-2.00	0.10-0.22	0.0-3.0	.20	.28			
5171B:											
Tula-----	0-1	---	0.20-0.30	6.00-20.00	0.35-0.45	---	.02	.02	4	3	86
	1-5	2-10	1.25-1.60	0.60-2.00	0.16-0.18	0.0-2.9	.24	.28			
	5-8	2-8	1.25-1.60	0.60-2.00	0.08-0.18	0.0-2.9	.24	.24			
	8-20	2-12	1.45-1.60	0.60-2.00	0.10-0.18	0.0-2.9	.24	.24			
	20-28	2-12	1.50-1.60	0.60-2.00	0.07-0.18	0.0-2.9	.24	.24			
	28-37	2-10	1.80-2.05	0.02-0.06	0.01-0.04	0.0-2.9	.28	.37			
	37-62	2-20	1.80-2.10	0.00-0.06	0.07-0.15	0.0-1.0	.24	.37			
	62-80	5-13	1.50-1.60	0.60-2.00	0.01-0.04	0.0-2.9	.28	.37			
Wormet-----	0-1	---	0.10-0.20	6.00-20.00	0.45-0.55	---	.02	.02	3	3	86
	1-2	5-20	1.50-1.60	0.60-6.00	0.13-0.15	0.0-2.9	.20	.20			
	2-6	5-25	1.45-1.60	0.60-6.00	0.08-0.22	0.0-2.9	.20	.20			
	6-8	5-25	1.45-1.60	0.60-6.00	0.08-0.22	0.0-2.9	.20	.20			
	8-19	5-25	1.45-1.60	0.60-6.00	0.08-0.22	0.0-2.9	.20	.20			
	19-60	0-5	1.60-1.80	6.00-20.00	0.01-0.07	0.0-2.9	.10	.15			
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	0-5	1.60-1.80	6.00-20.00	0.03-0.05	---	.10	.15			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind	Wind
							K	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct					
5172B: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	0-5	1.60-1.80	6.00-20.00	0.03-0.05	---	.10	.15			
Pence-----	0-2	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	3	3	86
	2-6	1-18	1.35-1.65	2.00-6.00	0.13-0.15	0.0-3.0	.24	.24			
	6-9	2-18	1.35-1.65	2.00-6.00	0.12-0.14	0.0-3.0	.20	.24			
	9-13	2-18	1.35-1.65	2.00-6.00	0.14-0.16	0.0-3.0	.20	.24			
	13-16	0-10	1.35-1.65	6.00-20.00	0.08-0.10	0.0-1.0	.15	.15			
	16-31	0-10	1.55-1.75	6.00-20.00	0.02-0.04	---	.15	.15			
	31-80	0-5	1.55-1.75	20.00-41.52	0.02-0.05	---	.05	.10			
Cathro-----	0-6	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	2	8	0
	6-31	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	31-80	5-30	1.70-1.80	0.20-2.00	0.10-0.22	0.0-3.0	.20	.28			
5172C: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	0-5	1.60-1.80	6.00-20.00	0.03-0.05	---	.10	.15			
Pence-----	0-2	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	3	3	86
	2-6	1-18	1.35-1.65	2.00-6.00	0.13-0.15	0.0-3.0	.24	.24			
	6-9	2-18	1.35-1.65	2.00-6.00	0.12-0.14	0.0-3.0	.20	.24			
	9-13	2-18	1.35-1.65	2.00-6.00	0.14-0.16	0.0-3.0	.20	.24			
	13-16	0-10	1.35-1.65	6.00-20.00	0.08-0.10	0.0-1.0	.15	.15			
	16-31	0-10	1.55-1.75	6.00-20.00	0.02-0.04	---	.15	.15			
	31-80	0-5	1.55-1.75	20.00-41.52	0.02-0.05	---	.05	.10			
Cathro-----	0-6	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	2	8	0
	6-31	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	31-80	5-30	1.70-1.80	0.20-2.00	0.10-0.22	0.0-3.0	.20	.28			
5172D: Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	0-5	1.60-1.80	6.00-20.00	0.03-0.05	---	.10	.15			

Soil Survey of Gogebic County, Michigan

Table 17.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							K	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct					
5172D:											
Pence-----	0-2	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	3	3	86
	2-6	1-18	1.35-1.65	2.00-6.00	0.13-0.15	0.0-3.0	.24	.24			
	6-9	2-18	1.35-1.65	2.00-6.00	0.12-0.14	0.0-3.0	.20	.24			
	9-13	2-18	1.35-1.65	2.00-6.00	0.14-0.16	0.0-3.0	.20	.24			
	13-16	0-10	1.35-1.65	6.00-20.00	0.08-0.10	0.0-1.0	.15	.15			
	16-31	0-10	1.55-1.75	6.00-20.00	0.02-0.04	---	.15	.15			
	31-80	0-5	1.55-1.75	20.00-41.52	0.02-0.05	---	.05	.10			
Cathro-----	0-6	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---	2	8	0
	6-31	---	0.20-0.30	0.20-6.00	0.35-0.45	---	---	---			
	31-80	5-30	1.70-1.80	0.20-2.00	0.10-0.22	0.0-3.0	.20	.28			
5173D:											
Gogebic-----	0-1	---	0.05-0.15	0.20-6.00	0.55-0.65	---	---	---	4	5	56
	1-5	1-18	1.30-1.60	2.00-6.00	0.12-0.18	0.0-3.0	.17	.24			
	5-8	1-18	1.30-1.60	0.60-2.00	0.12-0.23	0.0-3.0	.28	.37			
	8-12	1-18	1.35-1.70	0.60-2.00	0.12-0.21	0.0-3.0	.28	.37			
	12-20	1-18	1.35-1.70	0.60-2.00	0.10-0.20	0.0-3.0	.24	.28			
	20-33	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.20	.28			
	33-49	1-18	1.80-2.10	0.00-0.06	0.03-0.06	0.0-1.0	.24	.28			
	49-54	1-18	1.65-1.80	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	54-68	1-18	1.70-1.85	0.60-2.00	0.03-0.05	0.0-3.0	.20	.28			
	68-80	0-5	1.60-1.80	6.00-20.00	0.03-0.05	---	.10	.15			
Pence-----	0-2	---	0.10-0.20	0.60-6.00	0.45-0.55	---	---	---	3	3	86
	2-6	1-18	1.35-1.65	2.00-6.00	0.13-0.15	0.0-3.0	.24	.24			
	6-9	2-18	1.35-1.65	2.00-6.00	0.12-0.14	0.0-3.0	.20	.24			
	9-13	2-18	1.35-1.65	2.00-6.00	0.14-0.16	0.0-3.0	.20	.24			
	13-16	0-10	1.35-1.65	6.00-20.00	0.08-0.10	0.0-1.0	.15	.15			
	16-31	0-10	1.55-1.75	6.00-20.00	0.02-0.04	---	.15	.15			
	31-80	0-5	1.55-1.75	20.00-41.52	0.02-0.05	---	.05	.10			

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils

(Absence of an entry indicates that data were not estimated)

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
7: Histosols-----	0-51 51-80	3.9-4.8 ---	50-90 ---	--- ---	50-75 ---	0 ---
Aquents.						
10: Witbeck-----	0-6 6-10 10-22 22-30 30-39 39-60	4.5-6.0 4.5-6.0 4.5-6.0 5.1-6.5 5.1-6.5 5.1-6.5	50-90 2.0-5.0 0.5-1.0 0.0-0.5 0.0-0.5 0.0-0.5	96-160 0.0-20 0.0-13 0.0-15 0.0-15 0.0-15	--- --- --- --- --- ---	0 0 0 0 0 0
12A: Monico-----	0-2 2-4 4-7 7-15 15-28 28-38 38-47 47-65	3.5-6.5 3.5-6.5 3.5-6.5 3.5-6.5 5.1-7.3 5.1-7.3 5.1-7.3 5.1-7.3	50-90 2.0-5.0 0.5-2.0 0.5-3.0 0.5-3.0 0.5-1.0 0.0-0.5 0.0-0.5	--- --- --- --- --- --- --- ---	94-150 4.2-15 0.0-25 0.1-15 0.1-15 0.1-14 0.1-10 0.1-10	0 0 0 0 0 0 0 0
13B: Argonne-----	0-2 2-5 5-9 9-15 15-29 29-39 39-54 54-82	4.5-5.0 5.1-5.5 4.5-5.0 4.5-5.0 5.1-5.5 5.1-5.5 6.1-6.5 6.1-6.5	50-90 0.5-2.0 0.5-3.0 0.5-3.0 0.0-0.5 0.0-0.5 0.0-0.5 0.0-0.5	--- --- --- --- --- --- 0.0-16 1.0-8.0	94-150 0.0-18 3.0-15 0.1-11 0.1-10 0.1-10 --- ---	0 0 0 0 0 0 0 0
13C: Argonne-----	0-2 2-5 5-9 9-15 15-29 29-39 39-54 54-82	4.5-5.0 5.1-5.5 4.5-5.0 4.5-5.0 5.1-5.5 5.1-5.5 6.1-6.5 6.1-6.5	50-90 0.5-2.0 0.5-3.0 0.5-3.0 0.0-0.5 0.0-0.5 0.0-0.5 0.0-0.5	--- --- --- --- --- --- 0.0-16 1.0-8.0	94-150 0.0-18 3.0-15 0.1-11 0.1-10 0.1-10 --- ---	0 0 0 0 0 0 0 0
13D: Argonne-----	0-2 2-5 5-9 9-15 15-29 29-39 39-54 54-82	4.5-5.0 5.1-5.5 4.5-5.0 4.5-5.0 5.1-5.5 5.1-5.5 6.1-6.5 6.1-6.5	50-90 0.5-2.0 0.5-3.0 0.5-3.0 0.0-0.5 0.0-0.5 0.0-0.5 0.0-0.5	--- --- --- --- --- --- 0.0-16 1.0-8.0	94-150 0.0-18 3.0-15 0.1-11 0.1-10 0.1-10 --- ---	0 0 0 0 0 0 0 0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
15B:						
Wabeno-----	0-2	5.1-5.5	2.0-5.0	---	0.0-18	0
	2-4	5.1-5.5	0.5-2.0	---	0.0-18	0
	4-11	5.1-5.5	0.5-3.0	---	3.0-15	0
	11-23	5.1-5.5	0.5-3.0	---	0.1-11	0
	23-32	5.1-5.5	0.0-0.5	---	0.1-10	0
	32-42	5.6-6.0	0.0-0.5	---	0.0-16	0
	42-50	5.6-6.0	0.0-0.5	0.0-16	---	0
	50-60	5.6-6.0	0.0-0.5	1.0-8.0	---	0
15C:						
Wabeno-----	0-2	5.1-5.5	2.0-5.0	---	0.0-18	0
	2-4	5.1-5.5	0.5-2.0	---	0.0-18	0
	4-11	5.1-5.5	0.5-3.0	---	3.0-15	0
	11-23	5.1-5.5	0.5-3.0	---	0.1-11	0
	23-32	5.1-5.5	0.0-0.5	---	0.1-10	0
	32-42	5.6-6.0	0.0-0.5	---	0.0-16	0
	42-50	5.6-6.0	0.0-0.5	0.0-16	---	0
	50-60	5.6-6.0	0.0-0.5	1.0-8.0	---	0
16A:						
Fence-----	0-6	3.6-6.5	1.0-2.0	---	3.0-15	0
	6-7	3.6-6.5	0.5-1.0	---	2.0-15	0
	7-13	3.6-6.0	0.8-2.0	---	3.0-15	0
	13-15	4.5-7.5	0.0-0.5	2.0-15	---	0
	15-20	5.0-7.5	0.0-0.5	2.0-15	---	0
	20-35	5.5-7.8	0.0-0.5	2.0-15	---	0
	35-80	6.5-8.4	0.0-0.5	2.0-15	---	0
17B:						
Lode-----	0-7	5.1-5.5	2.0-5.0	---	4.0-15	0
	7-18	5.1-5.5	0.5-3.0	---	0.1-10	0
	18-24	5.1-5.5	0.5-3.0	---	3.0-10	0
	24-31	4.5-5.0	0.5-3.0	---	3.0-10	0
	31-37	5.1-5.5	0.0-0.5	---	3.0-10	0
	37-59	5.6-6.0	0.0-0.5	1.0-5.0	---	0
	59-80	5.6-6.0	0.0-0.5	1.0-5.0	---	0
17C:						
Lode-----	0-7	5.1-5.5	2.0-5.0	---	4.0-15	0
	7-18	5.1-5.5	0.5-3.0	---	0.1-10	0
	18-24	5.1-5.5	0.5-3.0	---	3.0-10	0
	24-31	4.5-5.0	0.5-3.0	---	3.0-10	0
	31-37	5.1-5.5	0.0-0.5	---	3.0-10	0
	37-59	5.6-6.0	0.0-0.5	1.0-5.0	---	0
	59-80	5.6-6.0	0.0-0.5	1.0-5.0	---	0
20B:						
Pence-----	0-2	3.6-5.5	50-90	---	94-150	0
	2-6	4.5-6.0	0.5-2.0	---	0.5-17	0
	6-9	4.5-6.0	0.5-3.0	---	1.6-11	0
	9-13	4.5-6.0	0.5-3.0	---	1.6-11	0
	13-16	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	16-31	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	31-80	5.1-6.5	0.0-0.5	0.5-3.0	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
20B:						
Lode-----	0-7	5.1-5.5	2.0-5.0	---	4.0-15	0
	7-18	5.1-5.5	0.5-3.0	---	0.1-10	0
	18-24	5.1-5.5	0.5-3.0	---	3.0-10	0
	24-31	4.5-5.0	0.5-3.0	---	3.0-10	0
	31-37	5.1-5.5	0.0-0.5	---	3.0-10	0
	37-59	5.6-6.0	0.0-0.5	1.0-5.0	---	0
	59-80	5.6-6.0	0.0-0.5	1.0-5.0	---	0
20C:						
Pence-----	0-2	3.6-5.5	50-90	---	94-150	0
	2-6	4.5-6.0	0.5-2.0	---	0.5-17	0
	6-9	4.5-6.0	0.5-3.0	---	1.6-11	0
	9-13	4.5-6.0	0.5-3.0	---	1.6-11	0
	13-16	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	16-31	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	31-80	5.1-6.5	0.0-0.5	0.5-3.0	---	0
21:						
Minocqua-----	0-4	4.5-7.8	30-60	120-190	---	0
	4-15	4.5-7.8	0.0-2.0	2.0-20	---	0
	15-28	4.5-6.5	0.0-0.5	1.0-15	---	0
	28-60	4.5-6.5	0.0-0.5	0.0-6.0	---	0
Leafriver-----	0-1	4.5-7.3	50-90	---	125-200	0
	1-14	4.5-7.3	50-90	---	125-200	0
	14-16	3.5-7.3	0.0-0.5	10-50	---	0
	16-51	3.5-7.3	0.0-0.5	1.0-15	---	0
23B:						
Chabeneau-----	0-1	3.5-6.0	50-90	---	94-150	0
	1-2	3.5-6.0	1.0-3.0	---	3.4-20	0
	2-5	3.5-6.0	0.7-3.0	---	3.4-20	0
	5-10	4.5-6.0	0.0-1.1	---	0.1-4.0	0
	10-22	4.5-6.0	0.0-0.4	---	0.1-4.0	0
	22-30	5.1-6.5	0.0-0.2	1.0-5.0	0.1-4.0	0
	30-48	5.1-6.5	0.0-0.1	1.0-5.0	0.1-4.0	0
	48-121	5.1-6.5	0.0-0.0	1.0-5.0	0.1-4.0	0
Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0
Pence-----	0-2	3.6-5.5	50-90	---	94-150	0
	2-6	4.5-6.0	0.5-2.0	---	0.5-17	0
	6-9	4.5-6.0	0.5-3.0	---	1.6-11	0
	9-13	4.5-6.0	0.5-3.0	---	1.6-11	0
	13-16	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	16-31	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	31-80	5.1-6.5	0.0-0.5	0.5-3.0	---	0
26B:						
Stambaugh-----	0-4	4.5-6.0	2.0-5.0	0.0-16	---	0
	4-10	4.5-6.0	0.5-3.0	0.0-16	---	0
	10-18	4.5-6.0	0.5-3.0	0.0-16	---	0
	18-22	5.6-6.0	0.5-2.0	0.0-16	---	0
	22-39	5.6-6.0	0.0-1.0	0.0-15	---	0
	39-50	5.1-6.5	0.0-0.5	0.0-8.6	---	0
	50-80	5.1-6.5	0.0-0.5	0.0-8.6	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
27:						
Lupton-----	0-8	3.9-4.8	50-90	---	94-150	0
	8-80	3.9-4.8	50-90	---	94-150	0
Tawas-----	0-22	3.9-4.8	50-90	---	94-150	0
	22-42	4.9-5.5	5.0-15	---	1.0-3.0	0
	42-80	4.8-5.6	1.0-5.0	---	1.0-3.0	0
28:						
Dawson-----	0-4	2.5-4.1	60-95	---	94-150	0
	4-9	2.5-4.1	60-95	---	94-150	0
	9-34	2.5-4.1	60-95	---	94-150	0
	34-36	4.0-5.0	0.5-2.0	---	1.0-26	0
	36-39	4.0-5.0	0.5-4.0	---	1.0-26	0
	39-50	4.0-5.0	0.3-2.0	---	1.0-26	0
	50-62	4.0-5.0	0.1-1.0	---	1.0-26	0
Greenwood-----	0-8	3.5-4.5	50-90	---	94-150	0
	8-11	3.5-4.5	50-90	---	94-150	0
	11-65	3.5-4.5	50-90	---	94-150	0
	65-80	3.5-4.5	50-90	---	94-150	0
Loxley-----	0-5	3.0-4.5	70-90	---	94-150	0
	5-45	3.2-4.5	70-90	---	94-150	0
	45-80	3.6-4.5	65-85	---	94-150	0
29B:						
Pence, very deep water table----	0-2	4.5-5.0	50-90	---	94-150	0
	2-6	4.5-7.3	0.5-1.0	1.0-15	---	0
	6-9	4.5-6.0	0.5-3.0	---	0.3-8.2	0
	9-13	4.5-6.0	0.5-3.0	---	0.3-8.2	0
	13-16	4.5-6.5	0.0-0.5	---	---	0
	16-31	4.5-6.5	0.0-0.5	---	---	0
	31-80	5.1-6.5	0.0-0.5	---	---	0
31:						
Evart-----	0-2	4.5-5.0	50-90	---	94-150	0
	2-9	5.1-7.8	2.0-5.0	---	0.3-30	0
	9-19	5.1-7.8	0.5-2.0	---	0.0-28	0
	19-33	5.1-8.4	0.0-0.5	---	0.2-12	0
	33-55	5.1-8.4	0.0-0.5	---	0.2-12	0
Tawas-----	0-22	3.9-4.8	50-90	---	94-150	0
	22-42	4.9-5.5	5.0-15	---	1.0-3.0	0
	42-80	4.8-5.6	1.0-5.0	---	1.0-3.0	0
32A:						
Net-----	0-2	3.5-5.5	50-90	---	94-150	0
	2-5	3.6-6.0	2.0-6.0	---	6.0-25	0
	5-6	3.6-6.0	0.5-2.0	---	6.0-12	0
	6-7	3.6-6.0	0.5-2.0	---	6.0-12	0
	7-15	3.6-6.0	0.5-2.0	---	6.0-12	0
	15-23	3.6-6.0	0.5-2.0	---	6.0-12	0
	23-39	3.6-6.0	0.0-0.5	---	1.0-6.0	0
	39-60	5.1-6.5	0.0-0.5	1.0-3.0	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
35A:						
Beechwood-----	0-6	3.5-5.0	50-90	---	50-75	0
	6-8	4.8-5.5	2.0-5.0	---	10-18	0
	8-10	5.1-6.5	0.5-1.0	8.0-16	---	0
	10-20	6.0-6.8	0.5-1.0	5.0-15	---	0
	20-28	6.0-6.9	0.5-1.0	5.0-15	---	0
	28-42	6.0-7.3	0.0-0.5	5.0-15	---	0
	42-80	6.0-7.3	0.0-0.5	5.0-15	---	0
36:						
Gay-----	0-4	4.5-6.0	75-90	---	94-150	0
	4-7	5.1-6.5	2.0-30	---	4.0-65	0
	7-11	5.1-6.5	0.5-2.0	2.0-10	---	0
	11-16	5.1-6.5	0.5-1.0	3.0-22	---	0
	16-30	5.6-7.3	0.0-0.5	3.0-8.0	---	0
	30-80	5.6-7.3	0.0-0.5	3.0-8.0	---	0
Pleine-----	0-9	3.9-4.8	50-90	---	94-150	0
	9-20	5.1-6.5	0.5-5.0	6.0-16	---	0
	20-33	5.1-6.5	0.2-0.5	6.0-11	---	0
	33-80	5.6-6.5	0.1-0.5	6.0-11	---	0
37B:						
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
Tula-----	0-1	3.9-4.8	50-90	---	94-150	0
	1-5	5.1-6.1	2.0-5.0	---	1.3-10	0
	5-8	5.1-6.1	0.5-3.0	6.0-12	---	0
	8-20	5.1-6.1	0.5-3.0	6.0-12	---	0
	20-28	5.1-6.1	0.5-3.0	6.0-12	---	0
	28-37	5.1-6.5	0.5-1.0	4.0-16	---	0
	37-62	5.6-6.5	0.5-1.0	4.0-16	---	0
	62-80	5.6-6.5	0.0-0.5	1.8-15	---	0
Lupton-----	0-20	5.0-6.6	50-90	125-200	---	0
	20-80	5.0-7.8	50-90	125-200	---	0
38B:						
Gogebic, sandy substratum-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	0.0-4.6	1.0-5.0	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
38C: Gogebic, sandy substratum-----						
	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	0.0-4.6	1.0-5.0	0
38D: Gogebic, sandy substratum-----						
	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	0.0-4.6	1.0-5.0	0
39B: Gogebic, sandy substratum-----						
	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	0.0-4.6	1.0-5.0	0
39C: Gogebic, sandy substratum-----						
	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	0.0-4.6	1.0-5.0	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
39D: Gogebic, sandy substratum-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	0.0-4.6	1.0-5.0	0
41: Lupton-----	0-8	5.0-6.5	50-90	125-200	---	0
	8-80	5.0-6.5	50-90	125-200	---	0
Pleine-----	0-9	3.9-4.8	50-90	---	94-150	0
	9-20	5.1-6.5	0.5-5.0	6.0-16	---	0
	20-33	5.1-6.5	0.2-0.5	6.0-11	---	0
	33-80	5.6-6.5	0.1-0.5	6.0-11	---	0
Cathro-----	0-6	3.9-4.8	50-90	---	94-150	0
	6-31	3.9-4.8	50-90	---	94-150	0
	31-80	5.6-8.4	0.0-0.5	4.0-14	---	0-30
42: Ausable-----	0-8	3.9-4.8	50-90	---	94-150	0
	8-16	5.6-7.8	0.0-0.5	0.0-9.2	---	0
	16-25	5.6-7.8	0.0-0.5	0.0-9.2	---	0
	25-36	5.6-7.8	0.0-0.5	0.0-9.2	---	0
	36-45	5.6-7.8	0.0-0.5	0.0-9.2	---	0
	45-80	5.6-7.8	0.0-0.5	0.0-9.2	---	0
Tawas-----	0-22	3.9-4.8	50-90	---	94-150	0
	22-42	4.9-5.5	5.0-15	---	1.0-3.0	0
	42-80	4.8-5.6	1.0-5.0	---	1.0-3.0	0
43B: Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0
Pence-----	0-2	3.6-5.5	50-90	---	94-150	0
	2-6	4.5-6.0	0.5-2.0	---	0.5-17	0
	6-9	4.5-6.0	0.5-3.0	---	1.6-11	0
	9-13	4.5-6.0	0.5-3.0	---	1.6-11	0
	13-16	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	16-31	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	31-80	5.1-6.5	0.0-0.5	0.5-3.0	---	0
43C: Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
43C:						
Pence-----	0-2	3.6-5.5	50-90	---	94-150	0
	2-6	4.5-6.0	0.5-2.0	---	0.5-17	0
	6-9	4.5-6.0	0.5-3.0	---	1.6-11	0
	9-13	4.5-6.0	0.5-3.0	---	1.6-11	0
	13-16	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	16-31	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	31-80	5.1-6.5	0.0-0.5	0.5-3.0	---	0
43D:						
Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0
Pence-----	0-2	3.6-5.5	50-90	---	94-150	0
	2-6	4.5-6.0	0.5-2.0	---	0.5-17	0
	6-9	4.5-6.0	0.5-3.0	---	1.6-11	0
	9-13	4.5-6.0	0.5-3.0	---	1.6-11	0
	13-16	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	16-31	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	31-80	5.1-6.5	0.0-0.5	0.5-3.0	---	0
44B:						
Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0
Keweenaw-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-4	4.5-6.1	0.5-2.0	---	0.0-11	0
	4-6	4.5-6.0	2.0-5.0	---	1.5-6.0	0
	6-25	5.0-6.0	0.5-3.0	2.0-8.0	---	0
	25-45	5.0-6.1	0.5-2.5	1.0-3.0	---	0
	45-56	5.0-6.1	0.0-0.5	1.0-3.0	---	0
	56-71	5.0-6.1	0.0-0.5	0.5-3.0	---	0
	71-90	5.0-6.1	0.0-0.5	0.5-5.0	---	0
Sarona, dense substratum-----	0-3	4.5-5.6	2.0-5.0	---	5.0-15	0
	3-6	4.5-5.6	0.5-2.0	---	1.0-5.0	0
	6-14	4.5-6.0	0.5-3.0	---	1.0-5.0	0
	14-21	4.5-6.0	0.5-3.0	---	1.0-5.0	0
	21-28	5.1-6.0	0.5-3.0	---	1.0-5.0	0
	28-47	5.1-6.5	0.0-0.5	---	0.5-4.0	0
	47-75	5.1-6.5	0.0-0.5	---	0.5-5.0	0
	75-90	5.1-6.5	0.0-0.5	---	0.5-5.0	0
44C:						
Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
44C:						
Keweenaw-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-4	4.5-6.1	0.5-2.0	---	0.0-11	0
	4-6	4.5-6.0	2.0-5.0	---	1.5-6.0	0
	6-25	5.0-6.0	0.5-3.0	2.0-8.0	---	0
	25-45	5.0-6.1	0.5-2.5	1.0-3.0	---	0
	45-56	5.0-6.1	0.0-0.5	1.0-3.0	---	0
	56-71	5.0-6.1	0.0-0.5	0.5-3.0	---	0
	71-90	5.0-6.1	0.0-0.5	0.5-5.0	---	0
Sarona, dense substratum-----	0-3	4.5-5.6	2.0-5.0	---	5.0-15	0
	3-6	4.5-5.6	0.5-2.0	---	1.0-5.0	0
	6-14	4.5-6.0	0.5-3.0	---	1.0-5.0	0
	14-21	4.5-6.0	0.5-3.0	---	1.0-5.0	0
	21-28	5.1-6.0	0.5-3.0	---	1.0-5.0	0
	28-47	5.1-6.5	0.0-0.5	---	0.5-4.0	0
	47-75	5.1-6.5	0.0-0.5	---	0.5-5.0	0
	75-90	5.1-6.5	0.0-0.5	---	0.5-5.0	0
44D:						
Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0
Keweenaw-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-4	4.5-6.1	0.5-2.0	---	0.0-11	0
	4-6	4.5-6.0	2.0-5.0	---	1.5-6.0	0
	6-25	5.0-6.0	0.5-3.0	2.0-8.0	---	0
	25-45	5.0-6.1	0.5-2.5	1.0-3.0	---	0
	45-56	5.0-6.1	0.0-0.5	1.0-3.0	---	0
	56-71	5.0-6.1	0.0-0.5	0.5-3.0	---	0
	71-90	5.0-6.1	0.0-0.5	0.5-5.0	---	0
Sarona, dense substratum-----	0-3	4.5-5.6	2.0-5.0	---	5.0-15	0
	3-6	4.5-5.6	0.5-2.0	---	1.0-5.0	0
	6-14	4.5-6.0	0.5-3.0	---	1.0-5.0	0
	14-21	4.5-6.0	0.5-3.0	---	1.0-5.0	0
	21-28	5.1-6.0	0.5-3.0	---	1.0-5.0	0
	28-47	5.1-6.5	0.0-0.5	---	0.5-4.0	0
	47-75	5.1-6.5	0.0-0.5	---	0.5-5.0	0
	75-90	5.1-6.5	0.0-0.5	---	0.5-5.0	0
46C:						
Amasa-----	0-1	3.6-5.5	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	1.0-22	0
	4-7	3.5-6.0	2.0-5.0	---	1.9-11	0
	7-23	3.5-6.0	0.5-3.0	---	0.7-8.6	0
	23-28	3.5-6.0	0.5-3.0	---	0.7-8.6	0
	28-41	4.5-6.5	0.0-0.5	---	0.1-3.0	0
	41-80	4.5-6.5	0.0-0.5	---	0.1-3.0	0
Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
46D:						
Amasa-----	0-1	3.6-5.5	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	1.0-22	0
	4-7	3.5-6.0	2.0-5.0	---	1.9-11	0
	7-23	3.5-6.0	0.5-3.0	---	0.7-8.6	0
	23-28	3.5-6.0	0.5-3.0	---	0.7-8.6	0
	28-41	4.5-6.5	0.0-0.5	---	0.1-3.0	0
	41-80	4.5-6.5	0.0-0.5	---	0.1-3.0	0
Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0
46E:						
Amasa-----	0-1	3.6-5.5	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	1.0-22	0
	4-7	3.5-6.0	2.0-5.0	---	1.9-11	0
	7-23	3.5-6.0	0.5-3.0	---	0.7-8.6	0
	23-28	3.5-6.0	0.5-3.0	---	0.7-8.6	0
	28-41	4.5-6.5	0.0-0.5	---	0.1-3.0	0
	41-80	4.5-6.5	0.0-0.5	---	0.1-3.0	0
Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0
46F:						
Amasa-----	0-1	3.5-6.0	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	1.0-22	0
	4-7	3.5-6.0	2.0-5.0	---	0.5-14	0
	7-23	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	23-28	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	28-41	4.5-6.5	0.0-0.5	---	0.0-2.6	0
	41-80	4.5-6.5	0.0-0.5	---	0.0-2.6	0
Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0
47B:						
Karlin, very deep water table-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0
Noseum-----	0-1	3.9-4.8	50-90	---	94-150	0
	1-4	5.0-6.2	0.5-2.0	4.0-12	---	0
	4-6	5.2-5.9	2.0-5.0	10-20	---	0
	6-14	5.2-5.9	0.5-3.0	4.0-15	---	0
	14-24	5.2-5.9	0.5-1.0	2.0-10	---	0
	24-37	5.2-6.2	0.0-0.5	0.5-4.0	---	0
	37-63	5.2-6.2	0.0-0.5	0.2-5.0	---	0
	63-80	5.2-6.2	0.0-0.5	0.1-2.0	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
47B:						
Gay-----	0-4	4.5-6.0	75-90	---	94-150	0
	4-7	5.1-6.5	2.0-30	---	4.0-65	0
	7-11	5.1-6.5	0.5-2.0	2.0-10	---	0
	11-16	5.1-6.5	0.5-1.0	3.0-22	---	0
	16-30	5.6-7.3	0.0-0.5	3.0-8.0	---	0
	30-80	5.6-7.3	0.0-0.5	3.0-8.0	---	0
48C:						
Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0
Michigamme-----	0-1	2.5-4.1	50-90	---	94-150	0
	1-2	3.5-5.5	2.0-5.0	---	0.1-15	0
	2-4	3.5-5.5	0.5-2.0	---	0.1-23	0
	4-7	3.5-5.5	2.0-5.0	---	0.1-15	0
	7-14	4.5-6.1	0.5-3.0	---	0.1-15	0
	14-20	5.1-6.5	0.5-3.0	---	0.1-15	0
	20-24	5.1-6.5	0.5-3.0	---	0.1-15	0
	24-31	5.1-6.5	0.0-0.5	---	0.1-10	0
	31-80	---	---	---	---	---
48F:						
Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0
Michigamme-----	0-1	2.5-4.1	50-90	---	94-150	0
	1-2	3.5-5.5	2.0-5.0	---	0.1-15	0
	2-4	3.5-5.5	0.5-2.0	---	0.1-23	0
	4-7	3.5-5.5	2.0-5.0	---	0.1-15	0
	7-14	4.5-6.1	0.5-3.0	---	0.1-15	0
	14-20	5.1-6.5	0.5-3.0	---	0.1-15	0
	20-24	5.1-6.5	0.5-3.0	---	0.1-15	0
	24-31	5.1-6.5	0.0-0.5	---	0.1-10	0
	31-80	---	---	---	---	---
49B:						
Pelissier-----	0-2	3.5-5.5	20-80	---	94-150	0
	2-6	3.5-5.5	0.5-1.5	4.0-10	1.0-10	0
	6-10	4.5-5.5	0.5-2.0	4.0-15	1.0-8.0	0
	10-21	4.5-5.5	0.2-1.5	3.0-10	1.0-5.0	0
	21-36	5.1-6.0	0.1-0.5	1.0-6.0	1.0-3.0	0
	36-80	5.1-6.0	0.1-0.2	0.5-3.0	0.5-2.0	0
Sarwet-----	0-2	4.0-4.5	50-90	---	94-150	0
	2-3	3.9-4.8	50-90	---	94-150	0
	3-7	4.5-6.0	0.5-2.0	---	0.4-19	0
	7-14	4.5-6.0	0.5-3.0	---	0.7-11	0
	14-22	4.5-6.0	0.5-3.0	---	---	0
	22-28	5.1-6.5	0.0-0.5	1.0-16	---	0
	28-38	5.1-6.5	0.0-0.5	1.0-16	---	0
	38-47	5.1-6.5	0.0-0.5	0.0-16	---	0
	47-50	5.1-6.5	0.0-0.5	1.0-20	---	0
	50-80	5.1-6.5	0.0-0.5	0.0-16	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
49C:						
Pelissier-----	0-2	3.5-5.5	20-80	---	94-150	0
	2-6	3.5-5.5	0.5-1.5	4.0-10	1.0-10	0
	6-10	4.5-5.5	0.5-2.0	4.0-15	1.0-8.0	0
	10-21	4.5-5.5	0.2-1.5	3.0-10	1.0-5.0	0
	21-36	5.1-6.0	0.1-0.5	1.0-6.0	1.0-3.0	0
	36-80	5.1-6.0	0.1-0.2	0.5-3.0	0.5-2.0	0
Sarwet-----	0-2	4.0-4.5	50-90	---	94-150	0
	2-3	3.9-4.8	50-90	---	94-150	0
	3-7	4.5-6.0	0.5-2.0	---	0.4-19	0
	7-14	4.5-6.0	0.5-3.0	---	0.7-11	0
	14-22	4.5-6.0	0.5-3.0	---	---	0
	22-28	5.1-6.5	0.0-0.5	1.0-16	---	0
	28-38	5.1-6.5	0.0-0.5	1.0-16	---	0
	38-47	5.1-6.5	0.0-0.5	0.0-16	---	0
	47-50	5.1-6.5	0.0-0.5	1.0-20	---	0
	50-80	5.1-6.5	0.0-0.5	0.0-16	---	0
49D:						
Pelissier-----	0-2	3.5-5.5	20-80	---	94-150	0
	2-6	3.5-5.5	0.5-1.5	4.0-10	1.0-10	0
	6-10	4.5-5.5	0.5-2.0	4.0-15	1.0-8.0	0
	10-21	4.5-5.5	0.2-1.5	3.0-10	1.0-5.0	0
	21-36	5.1-6.0	0.1-0.5	1.0-6.0	1.0-3.0	0
	36-80	5.1-6.0	0.1-0.2	0.5-3.0	0.5-2.0	0
52B:						
Pence-----	0-2	3.6-5.5	50-90	---	94-150	0
	2-6	4.5-6.0	0.5-2.0	---	0.5-17	0
	6-9	4.5-6.0	0.5-3.0	---	1.6-11	0
	9-13	4.5-6.0	0.5-3.0	---	1.6-11	0
	13-16	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	16-31	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	31-80	5.1-6.5	0.0-0.5	0.5-3.0	---	0
Vilas-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-4	3.5-6.0	0.5-2.0	---	0.0-12	0
	4-7	3.5-6.0	0.5-3.0	---	0.1-6.8	0
	7-17	3.5-6.0	0.5-3.0	---	0.1-6.8	0
	17-22	3.5-6.0	0.5-3.0	1.0-3.0	---	0
	22-35	5.1-6.5	0.0-0.5	1.0-3.0	---	0
	35-80	5.1-6.5	0.0-0.5	1.0-3.0	---	0
52C:						
Pence-----	0-2	3.6-5.5	50-90	---	94-150	0
	2-6	4.5-6.0	0.5-2.0	---	0.5-17	0
	6-9	4.5-6.0	0.5-3.0	---	1.6-11	0
	9-13	4.5-6.0	0.5-3.0	---	1.6-11	0
	13-16	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	16-31	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	31-80	5.1-6.5	0.0-0.5	0.5-3.0	---	0
Vilas-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-4	3.5-6.0	0.5-2.0	---	0.0-12	0
	4-7	3.5-6.0	0.5-3.0	---	0.1-6.8	0
	7-17	3.5-6.0	0.5-3.0	---	0.1-6.8	0
	17-22	3.5-6.0	0.5-3.0	1.0-3.0	---	0
	22-35	5.1-6.5	0.0-0.5	1.0-3.0	---	0
	35-80	5.1-6.5	0.0-0.5	1.0-3.0	---	0

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Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
53B:						
Manitowish-----	0-1	2.5-4.1	60-95	---	94-150	0
	1-2	3.9-4.8	50-90	---	94-150	0
	2-4	4.0-5.5	0.5-2.0	---	3.0-9.0	0
	4-5	4.0-5.5	2.0-5.0	---	3.0-8.0	0
	5-11	4.5-5.5	0.5-3.0	---	3.0-8.0	0
	11-22	4.5-5.5	0.5-1.0	---	3.0-8.0	0
	22-40	4.5-5.5	0.0-0.5	---	1.0-3.0	0
	40-80	5.1-6.5	0.0-0.5	---	1.0-3.0	0
Croswell-----	0-3	3.5-5.5	2.0-5.0	---	1.0-5.0	0
	3-7	3.5-5.5	0.5-2.0	---	1.0-5.0	0
	7-34	3.5-5.5	0.5-1.0	---	1.0-4.0	0
	34-80	3.5-6.5	0.0-0.5	---	1.0-2.0	0
57B:						
Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0
Manitowish-----	0-1	2.5-4.1	60-95	---	94-150	0
	1-2	3.9-4.8	50-90	---	94-150	0
	2-4	4.0-5.5	0.5-2.0	---	3.0-9.0	0
	4-5	4.0-5.5	2.0-5.0	---	3.0-8.0	0
	5-11	4.5-5.5	0.5-3.0	---	3.0-8.0	0
	11-22	4.5-5.5	0.5-1.0	---	3.0-8.0	0
	22-40	4.5-5.5	0.0-0.5	---	1.0-3.0	0
	40-80	5.1-6.5	0.0-0.5	---	1.0-3.0	0
57C:						
Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0
Manitowish-----	0-1	2.5-4.1	60-95	---	94-150	0
	1-2	3.9-4.8	50-90	---	94-150	0
	2-4	4.0-5.5	0.5-2.0	---	3.0-9.0	0
	4-5	4.0-5.5	2.0-5.0	---	3.0-8.0	0
	5-11	4.5-5.5	0.5-3.0	---	3.0-8.0	0
	11-22	4.5-5.5	0.5-1.0	---	3.0-8.0	0
	22-40	4.5-5.5	0.0-0.5	---	1.0-3.0	0
	40-80	5.1-6.5	0.0-0.5	---	1.0-3.0	0
58B:						
Vilas, very deep water table----	0-2	3.9-4.8	50-90	---	94-150	0
	2-4	3.5-6.0	0.5-2.0	---	0.0-12	0
	4-7	3.5-6.0	0.5-3.0	---	0.1-6.8	0
	7-17	3.5-6.0	0.5-3.0	---	0.1-6.8	0
	17-22	3.5-6.0	0.5-3.0	1.0-3.0	---	0
	22-35	5.1-6.5	0.0-0.5	1.0-3.0	---	0
	35-80	5.1-6.5	0.0-0.5	1.0-3.0	---	0
Croswell-----	0-3	3.5-5.5	2.0-5.0	---	1.0-5.0	0
	3-7	3.5-5.5	0.5-2.0	---	1.0-5.0	0
	7-34	3.5-5.5	0.5-1.0	---	1.0-4.0	0
	34-80	3.5-6.5	0.0-0.5	---	1.0-2.0	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
58B:						
Pence, very deep						
water table----	0-2	3.6-5.5	50-90	---	94-150	0
	2-6	4.5-6.0	0.5-2.0	---	0.5-17	0
	6-9	4.5-6.0	0.5-3.0	---	1.6-11	0
	9-13	4.5-6.0	0.5-3.0	---	1.6-11	0
	13-16	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	16-31	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	31-80	5.1-6.5	0.0-0.5	0.5-3.0	---	0
61:						
Tawas-----	0-22	3.9-4.8	50-90	---	94-150	0
	22-42	4.9-5.5	5.0-15	---	1.0-3.0	0
	42-80	4.8-5.6	1.0-5.0	---	1.0-3.0	0
Kinross-----	0-5	3.9-4.8	50-90	---	50-75	0
	5-10	4.0-5.0	0.5-2.0	---	1.0-3.0	0
	10-12	4.0-5.0	2.0-5.0	---	1.0-4.0	0
	12-30	4.5-5.5	0.5-3.0	---	0.0-2.0	0
	30-41	4.5-5.5	0.0-0.5	---	0.0-2.0	0
	41-80	4.5-5.5	0.0-0.5	---	0.0-2.0	0
62B:						
Pelkie-----	0-8	4.5-5.5	2.0-5.0	---	3.0-5.0	0
	8-32	4.5-5.5	0.0-0.5	---	1.0-3.0	0
	32-80	4.5-5.5	0.0-0.5	---	1.0-3.0	0
83:						
Bowstring-----	0-13	3.9-4.8	50-90	---	94-150	0
	13-15	5.6-8.4	10-30	125-200	---	0
	15-32	2.5-4.1	60-95	---	94-150	0
	32-36	2.5-4.1	60-95	---	94-150	0
	36-42	5.6-8.4	0.0-0.5	0.0-8.8	---	0
	42-80	5.6-8.4	0.0-0.5	0.0-6.2	---	0
141D:						
Oldman-----	0-1	3.6-5.5	50-90	---	94-150	0
	1-3	4.0-5.0	2.0-5.0	---	5.0-15	0
	3-23	4.0-5.5	2.0-5.0	---	3.0-10	0
	23-28	5.0-6.0	0.1-0.5	---	1.0-6.0	0
	28-43	5.0-6.0	0.1-0.5	---	1.0-6.0	0
	43-58	5.0-6.5	0.0-0.5	---	1.0-6.0	0
	58-80	5.0-6.5	0.0-0.5	---	1.0-6.0	0
141E:						
Oldman-----	0-1	3.6-5.5	50-90	---	94-150	0
	1-3	4.0-5.0	2.0-5.0	---	5.0-15	0
	3-23	4.0-5.5	2.0-5.0	---	3.0-10	0
	23-28	5.0-6.0	0.1-0.5	---	1.0-6.0	0
	28-43	5.0-6.0	0.1-0.5	---	1.0-6.0	0
	43-58	5.0-6.5	0.0-0.5	---	1.0-6.0	0
	58-80	5.0-6.5	0.0-0.5	---	1.0-6.0	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
141F:						
Porkies-----	0-1	2.5-4.1	50-90	---	94-150	0
	1-3	4.0-5.5	2.0-5.0	---	10-15	0
	3-4	4.5-5.5	0.5-2.0	---	1.0-6.0	0
	4-7	4.6-6.2	2.0-5.0	---	1.0-6.0	0
	7-31	4.8-6.2	0.5-3.0	---	1.0-6.0	0
	31-40	5.0-6.4	0.5-2.0	3.0-9.0	---	0
	40-50	5.5-6.4	0.1-0.5	3.0-9.0	---	0
	50-61	5.0-6.4	0.1-0.5	---	1.0-6.0	0
	61-90	5.6-6.4	0.0-0.5	2.0-8.0	---	0
214B:						
Amnicon-----	0-2	4.5-7.3	2.0-5.0	---	10-50	0
	2-5	4.5-6.5	1.0-3.0	---	8.0-55	0
	5-10	4.5-7.3	0.8-2.0	---	7.1-22	0
	10-16	6.1-7.8	0.5-2.0	10-35	---	0
	16-24	6.6-7.8	0.5-1.0	10-40	---	0-5
	24-43	7.4-8.5	0.2-0.8	10-40	---	5-20
	43-80	7.9-8.5	0.1-0.5	10-35	---	1-10
Bergland-----	0-1	3.5-5.0	50-90	---	100-180	0
	1-3	5.0-6.0	5.0-20	---	30-55	0
	3-8	5.2-6.5	1.0-5.0	25-45	---	0
	8-13	6.1-7.3	0.5-2.0	20-40	---	0
	13-25	7.2-7.9	0.2-1.0	20-40	---	0
	25-35	7.4-8.4	0.2-0.8	15-25	---	10-20
	35-48	7.9-8.4	0.1-0.5	12-25	---	10-20
	48-80	7.9-8.4	0.1-0.2	10-20	---	10-20
216B:						
Amnicon-----	0-2	4.5-7.3	2.0-5.0	---	10-50	0
	2-5	4.5-6.5	1.0-3.0	---	8.0-55	0
	5-10	4.5-7.3	0.8-2.0	---	7.1-22	0
	10-16	6.1-7.8	0.5-2.0	10-35	---	0
	16-24	6.6-7.8	0.5-1.0	10-40	---	0-5
	24-43	7.4-8.5	0.2-0.8	10-40	---	5-20
	43-80	7.9-8.5	0.1-0.5	10-35	---	1-10
217A:						
Cuttre-----	0-3	4.5-7.3	4.0-10	---	5.9-18	0
	3-6	5.1-6.0	1.0-3.0	---	6.8-21	0
	6-12	5.1-6.0	0.8-1.5	10-35	---	0
	12-25	6.6-7.8	0.0-0.5	10-70	---	0-5
	25-41	7.4-8.4	0.0-0.5	10-70	---	10-25
	41-80	7.9-9.0	0.0-0.5	10-70	---	5-20
218:						
Bergland-----	0-1	3.5-5.0	50-90	---	100-180	0
	1-3	5.0-6.0	5.0-20	---	30-55	0
	3-8	5.2-6.5	1.0-5.0	25-45	---	0
	8-13	6.1-7.3	0.5-2.0	20-40	---	0
	13-25	7.2-7.9	0.2-1.0	20-40	---	0
	25-35	7.4-8.4	0.2-0.8	15-25	---	10-20
	35-48	7.9-8.4	0.1-0.5	12-25	---	10-20
	48-80	7.9-8.4	0.1-0.2	10-20	---	10-20

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
219B:						
Payseor-----	0-7	4.5-6.0	2.0-8.0	31-48	---	0
	7-10	4.5-6.0	2.0-6.0	---	24-36	0
	10-18	5.1-7.3	0.5-2.0	31-48	---	0
	18-25	5.1-7.3	0.2-1.0	31-47	---	0
	25-37	6.1-8.4	0.1-0.5	1.1-21	---	0
	37-45	6.1-8.4	0.1-0.5	2.6-21	---	0-3
	45-80	6.1-8.4	0.0-0.2	---	0.0-7.3	0-1
Froberg-----	0-4	5.5-6.0	3.0-5.0	15-40	---	0
	4-8	5.6-7.3	0.5-2.0	15-30	---	0
	8-22	6.1-7.8	0.5-1.0	20-35	---	0-2
	22-32	7.4-8.4	0.2-0.8	20-30	---	0-15
	32-45	7.4-8.4	0.1-0.5	5.0-20	---	0-15
	45-80	7.9-8.4	0.0-0.5	5.0-20	---	0-15
222:						
Matchwood-----	0-1	4.0-4.8	50-90	---	94-150	0
	1-4	4.5-5.8	2.0-5.0	---	17-25	0
	4-10	5.0-5.8	0.0-0.5	---	17-25	0
	10-29	6.2-7.2	0.0-0.5	26-44	---	0-10
	29-50	7.4-8.2	0.0-0.5	8.0-16	---	2-20
	50-80	8.2-8.8	0.0-0.5	2.0-6.0	---	2-20
225A:						
Cuttre-----	0-3	4.5-7.3	4.0-10	---	5.9-18	0
	3-6	5.1-6.0	1.0-3.0	---	6.8-21	0
	6-12	5.1-6.0	0.8-1.5	10-35	---	0
	12-25	6.6-7.8	0.0-0.5	10-70	---	0-5
	25-41	7.4-8.4	0.0-0.5	10-70	---	10-25
	41-80	7.9-9.0	0.0-0.5	10-70	---	5-20
Bergland-----	0-1	3.5-5.0	50-90	---	100-180	0
	1-3	5.0-6.0	5.0-20	---	30-55	0
	3-8	5.2-6.5	1.0-5.0	25-45	---	0
	8-13	6.1-7.3	0.5-2.0	20-40	---	0
	13-25	7.2-7.9	0.2-1.0	20-40	---	0
	25-35	7.4-8.4	0.2-0.8	15-25	---	10-20
	35-48	7.9-8.4	0.1-0.5	12-25	---	10-20
	48-80	7.9-8.4	0.1-0.2	10-20	---	10-20
226B:						
Froberg-----	0-4	5.5-6.0	3.0-5.0	15-40	---	0
	4-8	5.6-7.3	0.5-2.0	15-30	---	0
	8-22	6.1-7.8	0.5-1.0	20-35	---	0-2
	22-32	7.4-8.4	0.2-0.8	20-30	---	0-15
	32-45	7.4-8.4	0.1-0.5	5.0-20	---	0-15
	45-80	7.9-8.4	0.0-0.5	5.0-20	---	0-15
230B:						
Moquah-----	0-5	4.1-6.1	2.0-5.0	---	1.9-6.0	0
	5-19	4.4-6.6	0.2-1.0	4.0-15	---	0
	19-48	5.3-7.1	0.2-1.0	2.0-10	---	0
	48-55	5.3-7.3	0.1-0.5	2.0-10	---	0
	55-80	6.1-7.3	0.1-0.5	1.0-5.0	---	0
Arnheim-----	0-5	4.5-7.3	2.0-4.0	5.0-20	---	0
	5-10	5.1-7.3	0.2-1.0	2.0-12	---	0
	10-80	5.6-7.3	0.1-0.5	1.0-10	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
231:						
Matchwood-----	0-1	4.0-4.8	50-90	---	94-150	0
	1-4	4.5-5.8	2.0-5.0	---	17-25	0
	4-10	5.0-5.8	0.0-0.5	---	17-25	0
	10-29	6.2-7.2	0.0-0.5	26-44	---	0-10
	29-50	7.4-8.2	0.0-0.5	8.0-16	---	2-20
	50-80	8.2-8.8	0.0-0.5	2.0-6.0	---	2-20
Dorval-----	0-4	3.9-4.8	50-90	---	94-150	0
	4-14	3.9-4.8	50-90	---	94-150	0
	14-32	3.9-4.8	50-90	---	94-150	0
	32-44	4.8-5.7	0.0-0.5	---	11-19	0
	44-50	4.8-5.7	0.0-0.5	---	11-19	0
	50-80	4.9-5.9	0.0-0.5	4.0-9.0	---	0
233:						
Schaat Creek----	0-5	4.5-5.8	2.0-5.0	---	4.0-11	0
	5-10	4.5-5.8	0.0-0.5	---	4.0-11	0
	10-19	4.8-5.8	0.0-0.5	14-20	---	0
	19-43	6.8-7.5	0.0-0.5	11-14	---	0
	43-54	7.4-8.4	0.0-0.5	7.0-11	---	10-20
	54-80	8.2-8.4	0.0-0.5	4.0-11	---	10-30
239D:						
Miskoaki-----	0-4	4.5-7.3	2.0-10	15-50	---	0
	4-10	5.1-7.3	0.8-3.0	10-40	---	0
	10-25	5.1-7.8	0.5-2.0	10-40	---	0-5
	25-53	7.9-8.5	0.2-0.5	10-40	---	5-20
	53-80	7.9-8.5	0.1-0.5	10-35	---	5-15
277B:						
Kellogg, sandy substratum-----	0-6	4.8-6.0	0.5-2.0	---	2.0-4.0	0
	6-9	4.8-6.0	0.5-2.0	---	2.0-4.0	0
	9-24	4.8-6.0	0.5-1.0	0.0-2.7	0.8-1.5	0
	24-31	5.1-6.5	0.2-0.5	2.7-11	0.8-1.5	0
	31-37	6.0-7.8	0.1-0.5	23-33	---	0
	37-59	6.6-8.4	0.0-0.5	23-33	---	0-15
	59-80	5.1-6.6	0.0-0.5	0.0-4.6	1.0-5.0	0
Allendale-----	0-1	3.5-4.5	50-90	---	94-150	0
	1-2	5.0-6.2	2.0-5.0	3.0-5.0	---	0
	2-6	4.8-5.9	0.5-2.0	---	0.8-2.0	0
	6-15	4.8-5.9	2.0-5.0	---	0.8-2.0	0
	15-23	4.8-5.9	2.0-5.0	---	0.8-2.0	0
	23-24	4.5-5.5	0.5-2.0	---	0.8-2.0	0
	24-35	4.7-5.8	0.0-0.5	---	17-25	0
	35-80	6.2-7.5	0.0-0.5	23-33	---	1-10
280B:						
Flintsteel-----	0-1	2.5-4.1	40-60	---	94-150	0
	1-5	4.5-6.0	2.0-5.0	---	10-30	0
	5-9	4.5-6.0	0.5-2.0	---	5.0-10	0
	9-12	4.5-6.0	0.5-1.0	---	5.0-10	0
	12-16	4.5-6.0	0.5-1.0	---	5.0-10	0
	16-22	4.8-6.5	0.5-1.0	7.0-15	---	0
	22-36	5.1-8.3	0.1-0.5	9.0-15	---	0-2
	36-48	7.9-8.5	0.1-0.5	5.0-11	---	5-20
	48-80	7.9-8.6	0.1-0.5	5.0-10	---	2-15

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
280C:						
Flintsteel-----	0-1	2.5-4.1	40-60	---	94-150	0
	1-5	4.5-6.0	2.0-5.0	---	10-30	0
	5-9	4.5-6.0	0.5-2.0	---	5.0-10	0
	9-12	4.5-6.0	0.5-1.0	---	5.0-10	0
	12-16	4.5-6.0	0.5-1.0	---	5.0-10	0
	16-22	4.8-6.5	0.5-1.0	7.0-15	---	0
	22-36	5.1-8.3	0.1-0.5	9.0-15	---	0-2
	36-48	7.9-8.5	0.1-0.5	5.0-11	---	5-20
	48-80	7.9-8.6	0.1-0.5	5.0-10	---	2-15
282B:						
Big Iron-----	0-1	2.5-4.1	50-95	---	94-150	0
	1-3	4.5-5.5	2.0-5.0	---	2.0-10	0
	3-4	4.5-5.5	0.5-2.0	---	2.0-10	0
	4-11	4.5-5.5	0.5-1.0	---	2.0-10	0
	11-17	4.5-5.5	0.0-0.5	---	2.0-10	0
	17-47	5.6-7.8	0.0-0.5	5.0-15	---	0
	47-66	6.6-8.4	0.0-0.5	3.0-12	---	0-20
	66-80	6.6-8.4	0.0-0.5	2.0-10	---	0-15
Flintsteel-----	0-1	2.5-4.1	40-60	---	94-150	0
	1-5	4.5-6.0	2.0-5.0	---	10-30	0
	5-9	4.5-6.0	0.5-2.0	---	5.0-10	0
	9-12	4.5-6.0	0.5-1.0	---	5.0-10	0
	12-16	4.5-6.0	0.5-1.0	---	5.0-10	0
	16-22	4.8-6.5	0.5-1.0	7.0-15	---	0
	22-36	5.1-8.3	0.1-0.5	9.0-15	---	0-2
	36-48	7.9-8.5	0.1-0.5	5.0-11	---	5-20
	48-80	7.9-8.6	0.1-0.5	5.0-10	---	2-15
283B:						
Loggerhead-----	0-4	4.0-5.5	2.0-6.0	---	3.0-10	0
	4-5	4.0-5.5	1.0-5.0	---	2.0-8.0	0
	5-15	4.0-5.5	0.5-3.0	---	1.0-8.0	0
	15-38	4.0-6.0	0.2-1.0	---	1.0-8.0	0
	38-56	5.1-7.3	0.2-0.5	---	3.0-12	0
	56-80	5.3-7.8	0.1-0.5	---	3.0-10	0
Noseum-----	0-1	3.9-4.8	50-90	---	94-150	0
	1-4	5.0-6.2	0.5-2.0	4.0-12	---	0
	4-6	5.2-5.9	2.0-5.0	10-20	---	0
	6-14	5.2-5.9	0.5-3.0	4.0-15	---	0
	14-24	5.2-5.9	0.5-1.0	2.0-10	---	0
	24-37	5.2-6.2	0.0-0.5	0.5-4.0	---	0
	37-63	5.2-6.2	0.0-0.5	0.2-5.0	---	0
	63-80	5.2-6.2	0.0-0.5	0.1-2.0	---	0
Ubyl-----	0-1	2.5-4.1	50-90	---	94-150	0
	1-4	4.0-6.0	2.0-5.0	---	4.0-6.0	0
	4-10	4.0-6.0	0.5-2.0	---	1.0-5.0	0
	10-12	4.0-6.0	2.0-5.0	---	5.0-25	0
	12-18	4.0-6.0	0.5-3.0	---	4.0-11	0
	18-29	5.1-6.5	0.2-0.5	---	4.0-10	0-1
	29-44	6.1-7.8	0.1-0.5	5.0-10	---	0-6
	44-80	7.9-8.4	0.0-0.5	4.0-10	---	0-10

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
283C:						
Loggerhead-----	0-4	4.0-5.5	2.0-6.0	---	3.0-10	0
	4-5	4.0-5.5	1.0-5.0	---	2.0-8.0	0
	5-15	4.0-5.5	0.5-3.0	---	1.0-8.0	0
	15-38	4.0-6.0	0.2-1.0	---	1.0-8.0	0
	38-56	5.1-7.3	0.2-0.5	---	3.0-12	0
	56-80	5.3-7.8	0.1-0.5	---	3.0-10	0
Noseum-----	0-1	3.9-4.8	50-90	---	94-150	0
	1-4	5.0-6.2	0.5-2.0	4.0-12	---	0
	4-6	5.2-5.9	2.0-5.0	10-20	---	0
	6-14	5.2-5.9	0.5-3.0	4.0-15	---	0
	14-24	5.2-5.9	0.5-1.0	2.0-10	---	0
	24-37	5.2-6.2	0.0-0.5	0.5-4.0	---	0
	37-63	5.2-6.2	0.0-0.5	0.2-5.0	---	0
	63-80	5.2-6.2	0.0-0.5	0.1-2.0	---	0
Ubyl-----	0-1	2.5-4.1	50-90	---	94-150	0
	1-4	4.0-6.0	2.0-5.0	---	4.0-6.0	0
	4-10	4.0-6.0	0.5-2.0	---	1.0-5.0	0
	10-12	4.0-6.0	2.0-5.0	---	5.0-25	0
	12-18	4.0-6.0	0.5-3.0	---	4.0-11	0
	18-29	5.1-6.5	0.2-0.5	---	4.0-10	0-1
	29-44	6.1-7.8	0.1-0.5	5.0-10	---	0-6
	44-80	7.9-8.4	0.0-0.5	4.0-10	---	0-10
284:						
Aquents.						
Gull Point-----	0-1	3.5-4.5	60-95	---	100-180	0
	1-7	5.6-6.5	2.0-5.0	20-36	---	0
	7-15	5.6-6.5	2.0-5.0	15-30	---	0
	15-28	5.6-6.5	1.0-4.0	10-25	---	0
	28-33	6.1-7.3	1.0-3.0	10-25	---	0
	33-40	7.0-7.8	0.1-1.0	5.0-15	---	0
	40-61	7.9-8.4	0.1-0.5	2.0-10	---	1-10
	61-80	8.0-9.0	0.1-0.5	2.0-10	---	2-10
285F:						
Rockland-----	0-1	2.5-4.1	50-90	---	94-150	0
	1-5	5.1-6.0	2.0-5.0	1.1-8.6	---	0
	5-23	5.2-6.5	0.5-1.0	4.6-17	---	0
	23-80	6.6-8.5	0.1-0.5	7.6-20	---	0-1
Arnheim-----	0-5	4.5-7.3	2.0-4.0	5.0-20	---	0
	5-10	5.1-7.3	0.2-1.0	2.0-12	---	0
	10-80	5.6-7.3	0.1-0.5	1.0-10	---	0
286A:						
Big Iron-----	0-1	2.5-4.1	50-90	---	94-150	0
	1-3	4.5-5.5	2.0-5.0	---	2.0-10	0
	3-4	4.5-5.5	0.5-2.0	---	2.0-10	0
	4-11	4.5-5.5	0.5-1.0	---	2.0-10	0
	11-17	4.5-5.5	0.0-0.5	---	2.0-10	0
	17-47	5.6-7.8	0.0-0.5	5.0-15	---	0
	47-66	6.6-8.4	0.0-0.5	3.0-12	---	0-20
	66-80	6.6-8.4	0.0-0.5	2.0-10	---	0-15

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
286A:						
Belding-----	0-1	3.9-4.8	50-90	---	94-150	0
	1-4	5.1-6.0	1.0-6.0	6.0-20	---	0
	4-9	5.1-6.0	1.0-4.0	4.0-15	---	0
	9-14	5.1-6.0	0.2-1.0	1.0-10	---	0
	14-19	5.1-6.0	0.2-1.0	1.0-10	---	0
	19-22	5.1-6.0	0.2-1.0	1.0-10	---	0
	22-34	7.4-8.5	0.1-0.5	5.0-15	---	0-5
	34-36	7.4-8.5	0.1-0.5	5.0-15	---	0-15
	36-80	7.4-8.5	0.1-0.5	5.0-15	---	0-20
287:						
Trap Falls-----	0-1	2.5-4.1	50-90	---	94-150	0
	1-10	4.5-7.2	2.0-5.0	10-30	---	0
	10-18	5.0-7.8	0.0-1.0	5.0-15	---	0
	18-31	5.6-7.8	0.0-0.5	5.0-15	---	0
	31-55	6.6-8.4	0.0-0.5	3.0-12	---	0
	55-80	6.6-8.4	0.0-0.5	2.0-10	---	0
Tonkey-----	0-8	5.1-5.9	2.0-5.0	35-45	---	0
	8-13	5.1-5.9	0.0-0.5	2.0-10	---	0
	13-28	5.1-5.9	0.0-0.5	2.0-10	---	0
	28-80	5.1-6.0	0.0-0.5	1.0-10	---	0
289B:						
Amasa-----	0-1	3.6-5.5	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	1.0-23	0
	4-7	3.5-6.0	2.0-5.0	---	1.9-11	0
	7-23	3.5-6.0	0.5-3.0	---	0.7-8.6	0
	23-28	3.5-6.0	0.5-3.0	---	0.7-8.6	0
	28-41	4.5-6.5	0.0-0.5	---	0.1-3.0	0
	41-80	4.5-6.5	0.0-0.5	---	0.1-3.0	0
290B:						
Flintsteel-----	0-1	2.5-4.1	40-60	---	94-150	0
	1-5	4.5-7.3	2.0-5.0	---	10-50	0
	5-9	4.5-6.0	0.5-2.0	---	5.0-10	0
	9-12	4.5-6.0	0.5-1.0	---	5.0-10	0
	12-16	4.5-6.0	0.5-1.0	---	5.0-10	0
	16-22	4.8-6.5	0.5-1.0	7.0-15	---	0
	22-36	5.1-8.3	0.1-0.5	9.0-15	---	0-2
	36-48	7.9-8.5	0.1-0.5	5.0-11	---	5-20
	48-80	7.9-8.6	0.1-0.5	5.0-10	---	2-15
290C:						
Flintsteel-----	0-1	2.5-4.1	40-60	---	94-150	0
	1-5	4.5-7.3	2.0-5.0	---	10-50	0
	5-9	4.5-6.0	0.5-2.0	---	5.0-10	0
	9-12	4.5-6.0	0.5-1.0	---	5.0-10	0
	12-16	4.5-6.0	0.5-1.0	---	5.0-10	0
	16-22	4.8-6.5	0.5-1.0	7.0-15	---	0
	22-36	5.1-8.3	0.1-0.5	9.0-15	---	0-2
	36-48	7.9-8.5	0.1-0.5	5.0-11	---	5-20
	48-80	7.9-8.6	0.1-0.5	5.0-10	---	2-15
291B:						
Kalkaska-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-6	3.6-5.5	0.5-2.0	---	1.0-15	0
	6-8	3.6-5.5	2.0-5.0	---	4.0-15	0
	8-17	4.5-6.0	0.5-3.0	---	2.0-5.0	0
	17-32	4.5-6.0	0.0-0.5	---	1.0-3.0	0
	32-80	4.5-6.0	0.0-0.5	---	1.0-3.0	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
291D:						
Kalkaska-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-6	3.6-5.5	0.5-2.0	---	1.0-15	0
	6-8	3.6-5.5	2.0-5.0	---	4.0-15	0
	8-17	4.5-6.0	0.5-3.0	---	2.0-5.0	0
	17-32	4.5-6.0	0.0-0.5	---	1.0-3.0	0
	32-80	4.5-6.0	0.0-0.5	---	1.0-3.0	0
292B:						
Manido-----	0-3	3.6-5.5	50-90	---	94-150	0
	3-9	3.5-4.4	0.5-2.0	---	1.0-2.0	0
	9-11	3.0-4.4	2.0-5.0	---	1.0-2.0	0
	11-17	3.5-5.2	0.5-3.0	---	3.0-7.0	0
	17-37	3.5-5.5	0.0-0.5	---	1.0-3.0	0
	37-60	3.5-5.5	0.0-0.5	---	1.0-3.0	0
	60-80	3.5-6.0	0.0-0.5	---	1.0-3.0	0
Richter-----	0-1	2.5-4.1	60-95	---	94-150	0
	1-4	4.4-6.0	2.0-5.0	---	3.0-10	0
	4-6	4.4-6.0	0.5-2.0	4.0-11	---	0
	6-10	4.4-6.0	0.5-3.0	4.0-11	---	0
	10-18	5.4-6.4	0.0-0.5	5.0-15	---	0
	18-35	5.4-7.3	0.0-0.5	5.0-15	---	0-4
	35-80	7.9-8.4	0.0-0.5	2.0-6.0	---	0-4
293A:						
Wainola-----	0-3	3.9-4.8	50-90	---	94-150	0
	3-10	3.8-4.9	0.5-2.0	---	0.8-2.4	0
	10-12	3.9-4.8	2.0-18	---	0.8-2.4	0
	12-26	4.8-5.8	0.5-3.0	---	0.8-2.4	0
	26-32	4.8-5.9	0.0-0.5	---	0.8-2.4	0
	32-80	5.2-6.1	0.0-0.5	1.0-3.0	---	0
Trap Falls-----	0-1	2.5-4.1	50-90	---	94-150	0
	1-10	4.5-7.2	2.0-5.0	10-30	---	0
	10-18	5.0-7.8	0.0-1.0	5.0-15	---	0
	18-31	5.6-7.8	0.0-0.5	5.0-15	---	0
	31-55	6.6-8.4	0.0-0.5	3.0-12	---	0
	55-80	6.6-8.4	0.0-0.5	2.0-10	---	0
296B:						
Manido-----	0-3	3.6-5.5	50-90	---	94-150	0
	3-9	3.5-4.4	0.5-2.0	---	1.0-2.0	0
	9-11	3.0-4.4	2.0-5.0	---	1.0-2.0	0
	11-17	3.5-5.2	0.5-3.0	---	3.0-7.0	0
	17-37	3.5-5.5	0.0-0.5	---	1.0-3.0	0
	37-60	3.5-5.5	0.0-0.5	---	1.0-3.0	0
	60-80	3.5-6.0	0.0-0.5	---	1.0-3.0	0
Fence-----	0-6	3.6-6.0	1.0-2.0	4.0-20	---	0
	6-7	3.6-6.5	0.5-1.0	---	2.0-15	0
	7-13	3.6-6.0	0.8-2.0	---	3.0-15	0
	13-15	4.5-7.5	0.0-0.5	2.0-15	---	0
	15-20	5.0-7.5	0.0-0.5	2.0-15	---	0
	20-35	5.5-7.8	0.0-0.5	2.0-15	---	0
	35-80	6.5-8.4	0.0-0.5	2.0-15	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
296B: Gogebic, sandy substratum-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	0.0-4.6	1.0-5.0	0
296D: Manido-----	0-3	3.6-5.5	50-90	---	94-150	0
	3-9	3.5-4.4	0.5-2.0	---	1.0-2.0	0
	9-11	3.0-4.4	2.0-5.0	---	1.0-2.0	0
	11-17	3.5-5.2	0.5-3.0	---	3.0-7.0	0
	17-37	3.5-5.5	0.0-0.5	---	1.0-3.0	0
	37-60	3.5-5.5	0.0-0.5	---	1.0-3.0	0
	60-80	3.5-6.0	0.0-0.5	---	1.0-3.0	0
Sporley-----	0-6	3.6-6.0	1.0-2.0	4.0-20	---	0
	6-7	4.9-5.9	0.5-2.0	---	2.0-6.0	0
	7-12	5.2-5.9	0.5-3.0	2.0-6.0	---	0
	12-15	4.9-5.9	0.5-2.0	---	1.0-5.0	0
	15-24	5.0-6.0	0.5-1.0	---	2.0-8.0	0
	24-30	5.0-6.0	0.0-1.0	4.0-12	---	0
	30-80	5.5-6.5	0.0-0.5	---	2.0-8.0	0
Gogebic, sandy substratum-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	0.0-4.6	1.0-5.0	0
299B: Zandi-----	0-0.5	3.6-5.5	50-90	---	94-150	0
	0.5-4	5.1-6.7	0.5-2.0	0.1-5.2	---	0
	4-6	4.6-5.5	0.5-1.0	---	2.4-8.1	0
	6-34	4.9-5.5	0.5-1.0	---	2.4-8.1	0
	34-42	4.5-5.4	0.0-0.5	---	1.0-5.1	0
	42-57	4.5-5.4	0.0-0.5	---	1.2-8.1	0
	57-80	4.5-5.4	0.0-0.5	---	1.2-8.1	0
Amasa-----	0-1	3.5-6.0	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	0.0-30	0
	4-7	3.5-6.0	2.0-5.0	---	0.5-14	0
	7-23	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	23-28	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	28-41	4.5-6.5	0.0-0.5	---	0.0-2.6	0
	41-80	4.5-6.5	0.0-0.5	---	0.0-2.6	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
299B:						
Flintsteel-----	0-1	2.5-4.1	40-60	---	94-150	0
	1-5	4.5-7.3	2.0-5.0	---	10-50	0
	5-9	4.5-6.0	0.5-2.0	---	5.0-10	0
	9-12	4.5-6.0	0.5-1.0	---	5.0-10	0
	12-16	4.5-6.0	0.5-1.0	---	5.0-10	0
	16-22	4.8-6.5	0.5-1.0	7.0-15	---	0
	22-36	5.1-8.3	0.1-0.5	9.0-15	---	0-2
	36-48	7.9-8.5	0.1-0.5	5.0-11	---	5-20
	48-80	7.9-8.6	0.1-0.5	5.0-10	---	2-15
299C:						
Zandi-----	0-0.5	3.6-5.5	50-90	---	94-150	0
	0.4-4	5.1-6.7	0.5-2.0	0.1-5.2	---	0
	4-6	4.6-5.5	0.5-1.0	---	2.4-8.1	0
	6-34	4.9-5.5	0.5-1.0	---	2.4-8.1	0
	34-42	4.5-5.4	0.0-0.5	---	1.0-5.1	0
	42-57	4.5-5.4	0.0-0.5	---	1.2-8.1	0
	57-80	4.5-5.4	0.0-0.5	---	1.2-8.1	0
Amasa-----	0-1	3.5-6.0	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	0.0-30	0
	4-7	3.5-6.0	2.0-5.0	---	0.5-14	0
	7-23	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	23-28	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	28-41	4.5-6.5	0.0-0.5	---	0.0-2.6	0
	41-80	4.5-6.5	0.0-0.5	---	0.0-2.6	0
Flintsteel-----	0-1	2.5-4.1	40-60	---	94-150	0
	1-5	4.5-7.3	2.0-5.0	---	10-50	0
	5-9	4.5-6.0	0.5-2.0	---	5.0-10	0
	9-12	4.5-6.0	0.5-1.0	---	5.0-10	0
	12-16	4.5-6.0	0.5-1.0	---	5.0-10	0
	16-22	4.8-6.5	0.5-1.0	7.0-15	---	0
	22-36	5.1-8.3	0.1-0.5	9.0-15	---	0-2
	36-48	7.9-8.5	0.1-0.5	5.0-11	---	5-20
	48-80	7.9-8.6	0.1-0.5	5.0-10	---	2-15
301A:						
Moodig-----	0-4	4.5-6.5	2.0-5.0	3.0-15	---	0
	4-9	3.5-6.5	0.5-2.0	2.0-15	---	0
	9-11	4.5-6.5	0.5-3.0	2.0-15	---	0
	11-18	4.5-6.5	0.5-3.0	2.0-15	---	0
	18-25	4.5-6.5	0.5-3.0	2.0-15	---	0
	25-30	5.6-6.5	0.0-0.5	2.0-15	---	0
	30-35	6.1-6.5	0.0-0.5	2.0-15	---	0
	35-47	6.1-6.5	0.0-0.5	2.0-15	---	0
	47-57	6.1-7.3	0.0-0.5	1.0-10	---	0
	57-63	6.1-7.3	0.0-0.5	1.0-10	---	0
	63-71	6.1-7.8	0.0-0.5	1.0-10	---	0
302B:						
Manitowish-----	0-1	2.5-4.1	60-95	---	94-150	0
	1-2	3.9-4.8	50-90	---	94-150	0
	2-4	4.0-5.5	0.5-2.0	---	3.0-9.0	0
	4-5	4.0-5.5	2.0-5.0	---	3.0-8.0	0
	5-11	4.5-5.5	0.5-3.0	---	3.0-8.0	0
	11-22	4.5-5.5	0.5-1.0	---	3.0-8.0	0
	22-40	4.5-5.5	0.0-0.5	---	1.0-3.0	0
	40-80	5.1-6.5	0.0-0.5	---	1.0-3.0	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
302C:						
Manitowish-----	0-1	2.5-4.1	60-95	---	94-150	0
	1-2	3.9-4.8	50-90	---	94-150	0
	2-4	4.0-5.5	0.5-2.0	---	3.0-9.0	0
	4-5	4.0-5.5	2.0-5.0	---	3.0-8.0	0
	5-11	4.5-5.5	0.5-3.0	---	3.0-8.0	0
	11-22	4.5-5.5	0.5-1.0	---	3.0-8.0	0
	22-40	4.5-5.5	0.0-0.5	---	1.0-3.0	0
	40-80	5.1-6.5	0.0-0.5	---	1.0-3.0	0
303:						
Bowstring-----	0-13	5.6-8.4	50-90	125-200	---	0
	13-15	5.6-8.4	0.0-0.5	0.0-10	---	0
	15-32	5.6-8.4	50-90	125-200	---	0
	32-36	5.6-8.4	50-90	125-200	---	0
	36-42	5.6-8.4	0.0-0.5	0.0-8.8	---	0
	42-80	5.6-8.4	0.0-0.5	0.0-7.6	---	0
Arnheim-----	0-5	4.5-7.3	2.0-4.0	5.0-20	---	0
	5-10	5.1-7.3	0.2-1.0	2.0-12	---	0
	10-80	5.6-7.3	0.1-0.5	1.0-10	---	0
305B:						
Keweenaw-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-4	4.5-6.1	0.5-2.0	---	0.0-11	0
	4-6	4.5-6.0	2.0-5.0	---	1.5-6.0	0
	6-25	5.0-6.0	0.5-3.0	2.0-8.0	---	0
	25-45	5.0-6.1	0.5-2.5	1.0-3.0	---	0
	45-56	5.0-6.1	0.0-0.5	1.0-3.0	---	0
	56-71	5.0-6.1	0.0-0.5	0.5-3.0	---	0
	71-90	5.0-6.1	0.0-0.5	0.5-5.0	---	0
Siskiwit-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-8	4.5-5.9	0.5-2.0	---	0.5-3.0	0
	8-11	4.7-5.9	2.0-5.0	4.0-8.0	---	0
	11-28	4.7-5.9	0.5-3.0	0.5-4.0	---	0
	28-34	5.2-6.2	0.5-1.0	0.5-5.0	---	0
	34-55	5.5-6.2	0.5-1.0	2.0-10	---	0
	55-80	5.2-6.2	0.0-0.5	0.5-5.0	---	0
305C:						
Keweenaw-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-4	4.5-6.1	0.5-2.0	---	0.0-11	0
	4-6	4.5-6.0	2.0-5.0	---	1.5-6.0	0
	6-25	5.0-6.0	0.5-3.0	2.0-8.0	---	0
	25-45	5.0-6.1	0.5-2.5	1.0-3.0	---	0
	45-56	5.0-6.1	0.0-0.5	1.0-3.0	---	0
	56-71	5.0-6.1	0.0-0.5	0.5-3.0	---	0
	71-90	5.0-6.1	0.0-0.5	0.5-5.0	---	0
Siskiwit-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-8	4.5-5.9	0.5-2.0	---	0.5-3.0	0
	8-11	4.7-5.9	2.0-5.0	4.0-8.0	---	0
	11-28	4.7-5.9	0.5-3.0	0.5-4.0	---	0
	28-34	5.2-6.2	0.5-1.0	0.5-5.0	---	0
	34-55	5.5-6.2	0.5-1.0	2.0-10	---	0
	55-80	5.2-6.2	0.0-0.5	0.5-5.0	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
307:						
Lupton-----	0-20	5.0-6.6	50-90	125-200	---	0
	20-80	5.0-7.8	50-90	125-200	---	0
Cathro-----	0-6	3.9-4.8	50-90	---	94-150	0
	6-31	3.9-4.8	50-90	---	94-150	0
	31-80	5.6-8.4	0.0-0.5	4.0-14	---	0-30
309:						
Cathro-----	0-6	3.9-4.8	50-90	---	94-150	0
	6-31	3.9-4.8	50-90	---	94-150	0
	31-80	5.6-8.4	0.0-0.5	4.0-14	---	0-30
310B:						
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
310C:						
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
310D:						
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
310E:						
Schweitzer-----	0-1	3.5-5.5	2.0-5.0	---	2.0-20	0
	1-5	3.5-5.5	0.5-2.0	---	2.0-20	0
	5-8	4.5-6.0	2.0-5.0	---	2.0-20	0
	8-21	4.5-6.0	0.5-3.0	---	2.0-20	0
	21-27	5.1-6.0	0.0-0.5	1.0-10	---	0
	27-43	5.1-6.0	0.0-0.5	1.0-10	---	0
	43-61	5.1-6.0	0.0-0.5	1.0-10	---	0
	61-80	5.6-6.5	0.0-0.5	1.0-10	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
311B:						
Tula-----	0-1	3.9-4.8	50-90	---	94-150	0
	1-5	5.1-6.1	2.0-5.0	---	1.3-10	0
	5-8	5.1-6.1	0.5-3.0	6.0-12	---	0
	8-20	5.1-6.1	0.5-3.0	6.0-12	---	0
	20-28	5.1-6.1	0.5-3.0	6.0-12	---	0
	28-37	5.1-6.5	0.5-1.0	4.0-16	---	0
	37-62	5.6-6.5	0.5-1.0	4.0-16	---	0
	62-80	5.6-6.5	0.0-0.5	1.8-15	---	0
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
312A:						
Tula-----	0-1	3.9-4.8	50-90	---	94-150	0
	1-5	5.1-6.1	2.0-5.0	---	1.3-10	0
	5-8	5.1-6.1	0.5-3.0	6.0-12	---	0
	8-20	5.1-6.1	0.5-3.0	6.0-12	---	0
	20-28	5.1-6.1	0.5-3.0	6.0-12	---	0
	28-37	5.1-6.5	0.5-1.0	4.0-16	---	0
	37-62	5.6-6.5	0.5-1.0	4.0-16	---	0
	62-80	5.6-6.5	0.0-0.5	1.8-15	---	0
Foxpaw-----	0-1	3.5-4.4	50-90	---	80-120	0
	1-3	3.5-4.8	50-90	---	50-75	0
	3-8	3.5-5.0	0.5-2.0	---	1.5-16	0
	8-15	4.5-5.5	2.0-5.0	---	2.8-14	0
	15-23	4.5-5.5	0.5-3.0	---	1.3-12	0
	23-32	4.5-5.5	0.0-0.5	---	0.6-8.3	0
	32-80	4.5-5.5	0.0-0.5	---	0.6-8.3	0
Gay-----	0-4	4.5-6.0	75-90	---	94-150	0
	4-7	5.1-6.5	2.0-30	---	4.0-65	0
	7-11	5.1-6.5	0.5-2.0	2.0-10	---	0
	11-16	5.1-6.5	0.5-1.0	3.0-22	---	0
	16-30	5.6-7.3	0.0-0.5	3.0-8.0	---	0
	30-80	5.6-7.3	0.0-0.5	3.0-8.0	---	0
316:						
Gay-----	0-7	4.5-6.5	2.0-5.0	---	4.2-15	0
	7-11	5.1-6.5	0.5-2.0	2.0-10	---	0
	11-16	5.1-6.5	0.5-1.0	3.0-22	---	0
	16-30	5.6-7.3	0.0-0.5	3.0-8.0	---	0
	30-80	5.6-7.3	0.0-0.5	3.0-8.0	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
317B: Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
317C: Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
317D: Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
319B: McMillan-----	0-1	3.6-5.5	50-100	---	94-150	0
	1-2	4.0-5.5	2.0-6.0	---	0.3-7.7	0
	2-5	4.0-5.5	0.5-2.0	---	0.0-9.7	0
	5-9	4.0-5.5	0.8-4.0	---	0.2-6.4	0
	9-14	4.0-5.5	0.2-1.0	---	0.1-3.9	0
	14-19	4.0-5.5	0.2-0.8	---	0.1-3.6	0
	19-29	5.0-6.0	0.1-0.5	0.5-3.0	---	0
	29-72	5.0-6.0	0.1-0.5	0.5-3.0	---	0
	72-80	5.0-7.0	0.0-0.2	0.1-1.0	---	0
Noseum-----	0-1	3.9-4.8	50-90	---	94-150	0
	1-4	5.0-6.2	0.5-2.0	4.0-12	---	0
	4-6	5.2-5.9	2.0-5.0	10-20	---	0
	6-14	5.2-5.9	0.5-3.0	4.0-15	---	0
	14-24	5.2-5.9	0.5-1.0	2.0-10	---	0
	24-37	5.2-6.2	0.0-0.5	0.5-4.0	---	0
	37-63	5.2-6.2	0.0-0.5	0.2-5.0	---	0
	63-80	5.2-6.2	0.0-0.5	0.1-2.0	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
319C:						
McMillan-----	0-1	3.6-5.5	50-100	---	94-150	0
	1-2	4.0-5.5	2.0-6.0	---	0.3-7.7	0
	2-5	4.0-5.5	0.5-2.0	---	0.0-9.7	0
	5-9	4.0-5.5	0.8-4.0	---	0.2-6.4	0
	9-14	4.0-5.5	0.2-1.0	---	0.1-3.9	0
	14-19	4.0-5.5	0.2-0.8	---	0.1-3.6	0
	19-29	5.0-6.0	0.1-0.5	0.5-3.0	---	0
	29-72	5.0-6.0	0.1-0.5	0.5-3.0	---	0
	72-80	5.0-7.0	0.0-0.2	0.1-1.0	---	0
Islandlake-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-7	4.5-5.5	2.0-5.0	---	1.0-3.0	0
	7-9	4.5-5.5	0.5-3.0	---	1.0-3.0	0
	9-35	4.5-5.5	0.5-3.0	---	1.0-3.0	0
	35-45	4.5-5.5	0.5-2.0	---	1.0-3.0	0
	45-80	4.5-5.5	0.0-0.5	---	1.0-3.0	0
319D:						
McMillan-----	0-1	3.6-5.5	50-100	---	94-150	0
	1-2	4.0-5.5	2.0-6.0	---	0.3-7.7	0
	2-5	4.0-5.5	0.5-2.0	---	0.0-9.7	0
	5-9	4.0-5.5	0.8-4.0	---	0.2-6.4	0
	9-14	4.0-5.5	0.2-1.0	---	0.1-3.9	0
	14-19	4.0-5.5	0.2-0.8	---	0.1-3.6	0
	19-29	5.0-6.0	0.1-0.5	0.5-3.0	---	0
	29-72	5.0-6.0	0.1-0.5	0.5-3.0	---	0
	72-80	5.0-7.0	0.0-0.2	0.1-1.0	---	0
Islandlake-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-7	4.5-5.5	2.0-5.0	---	1.0-3.0	0
	7-9	4.5-5.5	0.5-3.0	---	1.0-3.0	0
	9-35	4.5-5.5	0.5-3.0	---	1.0-3.0	0
	35-45	4.5-5.5	0.5-2.0	---	1.0-3.0	0
	45-80	4.5-5.5	0.0-0.5	---	1.0-3.0	0
319E:						
McMillan-----	0-1	3.6-5.5	50-100	---	94-150	0
	1-2	4.0-5.5	2.0-6.0	---	0.3-7.7	0
	2-5	4.0-5.5	0.5-2.0	---	0.0-9.7	0
	5-9	4.0-5.5	0.8-4.0	---	0.2-6.4	0
	9-14	4.0-5.5	0.2-1.0	---	0.1-3.9	0
	14-19	4.0-5.5	0.2-0.8	---	0.1-3.6	0
	19-29	5.0-6.0	0.1-0.5	0.5-3.0	---	0
	29-72	5.0-6.0	0.1-0.5	0.5-3.0	---	0
	72-80	5.0-7.0	0.0-0.2	0.1-1.0	---	0
Islandlake-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-7	4.5-5.5	2.0-5.0	---	1.0-3.0	0
	7-9	4.5-5.5	0.5-3.0	---	1.0-3.0	0
	9-35	4.5-5.5	0.5-3.0	---	1.0-3.0	0
	35-45	4.5-5.5	0.5-2.0	---	1.0-3.0	0
	45-80	4.5-5.5	0.0-0.5	---	1.0-3.0	0
322B:						
Stutts-----	0-1	3.6-5.5	40-70	---	94-150	0
	1-6	4.5-5.2	0.5-2.0	1.0-4.0	---	0
	6-8	4.8-5.9	1.0-5.0	---	1.0-5.0	0
	8-15	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	15-18	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	18-28	5.5-6.5	0.0-0.5	---	0.5-4.0	0
	28-80	5.5-6.5	0.0-0.3	0.1-2.0	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
322B:						
Keweenaw-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-4	4.5-6.1	0.5-2.0	---	0.0-11	0
	4-6	4.5-6.0	2.0-5.0	---	1.5-6.0	0
	6-25	5.0-6.0	0.5-3.0	2.0-8.0	---	0
	25-45	5.0-6.1	0.5-2.5	1.0-3.0	---	0
	45-56	5.0-6.1	0.0-0.5	1.0-3.0	---	0
	56-71	5.0-6.1	0.0-0.5	0.5-3.0	---	0
	71-90	5.0-6.1	0.0-0.5	0.5-5.0	---	0
322C:						
Stutts-----	0-1	3.6-5.5	40-70	---	94-150	0
	1-6	4.5-5.2	0.5-2.0	1.0-4.0	---	0
	6-8	4.8-5.9	1.0-5.0	---	1.0-5.0	0
	8-15	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	15-18	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	18-28	5.5-6.5	0.0-0.5	---	0.5-4.0	0
	28-80	5.5-6.5	0.0-0.3	0.1-2.0	---	0
Keweenaw-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-4	4.5-6.1	0.5-2.0	---	0.0-11	0
	4-6	4.5-6.0	2.0-5.0	---	1.5-6.0	0
	6-25	5.0-6.0	0.5-3.0	2.0-8.0	---	0
	25-45	5.0-6.1	0.5-2.5	1.0-3.0	---	0
	45-56	5.0-6.1	0.0-0.5	1.0-3.0	---	0
	56-71	5.0-6.1	0.0-0.5	0.5-3.0	---	0
	71-90	5.0-6.1	0.0-0.5	0.5-5.0	---	0
322D:						
Stutts-----	0-1	3.6-5.5	40-70	---	94-150	0
	1-6	4.5-5.2	0.5-2.0	1.0-4.0	---	0
	6-8	4.8-5.9	1.0-5.0	---	1.0-5.0	0
	8-15	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	15-18	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	18-28	5.5-6.5	0.0-0.5	---	0.5-4.0	0
	28-80	5.5-6.5	0.0-0.3	0.1-2.0	---	0
Keweenaw-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-4	4.5-6.1	0.5-2.0	---	0.0-11	0
	4-6	4.5-6.0	2.0-5.0	---	1.5-6.0	0
	6-25	5.0-6.0	0.5-3.0	2.0-8.0	---	0
	25-45	5.0-6.1	0.5-2.5	1.0-3.0	---	0
	45-56	5.0-6.1	0.0-0.5	1.0-3.0	---	0
	56-71	5.0-6.1	0.0-0.5	0.5-3.0	---	0
	71-90	5.0-6.1	0.0-0.5	0.5-5.0	---	0
323B:						
Keweenaw-----	0-2	3.5-5.6	50-90	---	94-150	0
	2-4	4.5-6.5	0.5-2.0	2.0-10	---	0
	4-6	4.5-6.0	2.0-5.0	---	1.5-6.0	0
	6-25	5.0-6.0	0.5-3.0	2.0-8.0	---	0
	25-45	5.0-6.1	0.5-2.5	1.0-3.0	---	0
	45-56	5.0-6.1	0.0-0.5	1.0-3.0	---	0
	56-71	5.0-6.1	0.0-0.5	0.5-3.0	---	0
	71-90	5.0-6.1	0.0-0.5	0.5-5.0	---	0
Kalkaska-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-6	3.6-5.5	0.5-2.0	---	1.0-15	0
	6-8	3.6-5.5	2.0-5.0	---	4.0-15	0
	8-17	4.5-6.0	0.5-3.0	---	2.0-5.0	0
	17-32	4.5-6.0	0.0-0.5	---	1.0-3.0	0
	32-80	4.5-6.0	0.0-0.5	---	1.0-3.0	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
323C:						
Keweenaw-----	0-2	3.5-5.6	50-90	---	94-150	0
	2-4	4.5-6.5	0.5-2.0	2.0-10	---	0
	4-6	4.5-6.0	2.0-5.0	---	1.5-6.0	0
	6-25	5.0-6.0	0.5-3.0	2.0-8.0	---	0
	25-45	5.0-6.1	0.5-2.5	1.0-3.0	---	0
	45-56	5.0-6.1	0.0-0.5	1.0-3.0	---	0
	56-71	5.0-6.1	0.0-0.5	0.5-3.0	---	0
	71-90	5.0-6.1	0.0-0.5	0.5-5.0	---	0
Kalkaska-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-6	3.6-5.5	0.5-2.0	---	1.0-15	0
	6-8	3.6-5.5	2.0-5.0	---	4.0-15	0
	8-17	4.5-6.0	0.5-3.0	---	2.0-5.0	0
	17-32	4.5-6.0	0.0-0.5	---	1.0-3.0	0
	32-80	4.5-6.0	0.0-0.5	---	1.0-3.0	0
323D:						
Keweenaw-----	0-2	3.5-5.6	50-90	---	94-150	0
	2-4	4.5-6.5	0.5-2.0	2.0-10	---	0
	4-6	4.5-6.0	2.0-5.0	---	1.5-6.0	0
	6-25	5.0-6.0	0.5-3.0	2.0-8.0	---	0
	25-45	5.0-6.1	0.5-2.5	1.0-3.0	---	0
	45-56	5.0-6.1	0.0-0.5	1.0-3.0	---	0
	56-71	5.0-6.1	0.0-0.5	0.5-3.0	---	0
	71-90	5.0-6.1	0.0-0.5	0.5-5.0	---	0
Kalkaska-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-6	3.6-5.5	0.5-2.0	---	1.0-15	0
	6-8	3.6-5.5	2.0-5.0	---	4.0-15	0
	8-17	4.5-6.0	0.5-3.0	---	2.0-5.0	0
	17-32	4.5-6.0	0.0-0.5	---	1.0-3.0	0
	32-80	4.5-6.0	0.0-0.5	---	1.0-3.0	0
325B:						
Siskiwit-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-8	4.5-5.9	0.5-2.0	---	0.5-3.0	0
	8-11	4.7-5.9	2.0-5.0	4.0-8.0	---	0
	11-28	4.7-5.9	0.5-3.0	0.5-4.0	---	0
	28-34	5.2-6.2	0.5-1.0	0.5-5.0	---	0
	34-55	5.5-6.2	0.5-1.0	2.0-10	---	0
	55-80	5.2-6.2	0.0-0.5	0.5-5.0	---	0
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
325C:						
Siskiwit-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-8	4.5-5.9	0.5-2.0	---	0.5-3.0	0
	8-11	4.7-5.9	2.0-5.0	4.0-8.0	---	0
	11-28	4.7-5.9	0.5-3.0	0.5-4.0	---	0
	28-34	5.2-6.2	0.5-1.0	0.5-5.0	---	0
	34-55	5.5-6.2	0.5-1.0	2.0-10	---	0
	55-80	5.2-6.2	0.0-0.5	0.5-5.0	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
325C:						
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
327:						
Foxpaw-----	0-1	3.5-4.4	50-90	---	80-120	0
	1-3	3.5-4.8	50-90	---	50-75	0
	3-8	3.5-5.0	0.5-2.0	---	1.5-16	0
	8-15	4.5-5.5	2.0-5.0	---	2.8-14	0
	15-23	4.5-5.5	0.5-3.0	---	1.3-12	0
	23-32	4.5-5.5	0.0-0.5	---	0.6-8.3	0
	32-80	4.5-5.5	0.0-0.5	---	0.6-8.3	0
Sarwet-----	0-2	4.0-4.5	50-90	---	94-150	0
	2-3	3.9-4.8	50-90	---	94-150	0
	3-7	4.5-6.0	0.5-2.0	---	0.4-19	0
	7-14	4.5-6.0	0.5-3.0	---	0.7-11	0
	14-22	4.5-6.0	0.5-3.0	---	---	0
	22-28	5.1-6.5	0.0-0.5	1.0-16	---	0
	28-38	5.1-6.5	0.0-0.5	1.0-16	---	0
	38-47	5.1-6.5	0.0-0.5	0.0-16	---	0
	47-50	5.1-6.5	0.0-0.5	1.0-20	---	0
	50-80	5.1-6.5	0.0-0.5	0.0-16	---	0
328B:						
Annalake-----	0-9	4.5-6.0	2.0-5.0	---	3.0-20	0
	9-16	4.5-6.0	0.5-2.0	---	3.0-10	0
	16-31	4.5-6.0	0.2-1.0	---	1.0-5.0	0
	31-48	5.1-7.3	0.1-0.5	1.0-10	---	0
	48-61	5.1-7.3	0.1-0.5	1.0-10	---	0
	61-80	5.5-8.2	0.1-0.5	1.0-5.0	---	0
Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0
328C:						
Annalake-----	0-9	4.5-6.0	2.0-5.0	---	3.0-20	0
	9-16	4.5-6.0	0.5-2.0	---	3.0-10	0
	16-31	4.5-6.0	0.2-1.0	---	1.0-5.0	0
	31-48	5.1-7.3	0.1-0.5	1.0-10	---	0
	48-61	5.1-7.3	0.1-0.5	1.0-10	---	0
	61-80	5.5-8.2	0.1-0.5	1.0-5.0	---	0
Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
328D:						
Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0
Zandi-----	0-0.5	3.6-5.5	50-90	---	94-150	0
	0.5-4	5.1-6.7	0.5-2.0	0.1-5.2	---	0
	4-6	4.6-5.5	0.5-1.0	---	2.4-8.1	0
	6-34	4.9-5.5	0.5-1.0	---	2.4-8.1	0
	34-42	4.5-5.4	0.0-0.5	---	1.0-5.1	0
	42-57	4.5-5.4	0.0-0.5	---	1.2-8.1	0
	57-80	4.5-5.4	0.0-0.5	---	1.2-8.1	0
329A:						
Tula-----	0-1	3.9-4.8	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	5.1-6.1	0.5-3.0	6.0-12	---	0
	8-20	5.1-6.1	0.5-3.0	6.0-12	---	0
	20-28	5.1-6.1	0.5-3.0	6.0-12	---	0
	28-37	5.1-6.5	0.5-1.0	4.0-16	---	0
	37-62	5.6-6.5	0.5-1.0	4.0-16	---	0
	62-80	5.6-6.5	0.0-0.5	1.8-15	---	0
351B:						
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
351C:						
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
351D:						
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
351E: Schweitzer-----	0-1	3.8-5.9	2.0-5.0	---	5.0-15	0
	1-5	3.5-5.5	0.5-2.0	---	2.0-20	0
	5-8	4.5-6.0	2.0-5.0	---	2.0-20	0
	8-21	4.5-6.0	0.5-3.0	---	2.0-20	0
	21-27	5.1-6.0	0.0-0.5	1.0-10	---	0
	27-43	5.1-6.0	0.0-0.5	1.0-10	---	0
	43-61	5.1-6.0	0.0-0.5	1.0-10	---	0
	61-80	5.6-6.5	0.0-0.5	1.0-10	---	0
351F: Schweitzer-----	0-1	3.8-5.9	2.0-5.0	---	5.0-15	0
	1-5	3.5-5.5	0.5-2.0	---	2.0-20	0
	5-8	4.5-6.0	2.0-5.0	---	2.0-20	0
	8-21	4.5-6.0	0.5-3.0	---	2.0-20	0
	21-27	5.1-6.0	0.0-0.5	1.0-10	---	0
	27-43	5.1-6.0	0.0-0.5	1.0-10	---	0
	43-61	5.1-6.0	0.0-0.5	1.0-10	---	0
	61-80	5.6-6.5	0.0-0.5	1.0-10	---	0
353A: Tula-----	0-1	3.9-4.8	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	5.1-6.1	0.5-3.0	6.0-12	---	0
	8-20	5.1-6.1	0.5-3.0	6.0-12	---	0
	20-28	5.1-6.1	0.5-3.0	6.0-12	---	0
	28-37	5.1-6.5	0.5-1.0	4.0-16	---	0
	37-62	5.6-6.5	0.5-1.0	4.0-16	---	0
	62-80	5.6-6.5	0.0-0.5	1.8-15	---	0
354B: Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
354C: Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
354D: Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
354E: Schweitzer-----	0-1	3.5-5.5	2.0-5.0	---	2.0-20	0
	1-5	3.5-5.5	0.5-2.0	---	2.0-20	0
	5-8	4.5-6.0	2.0-5.0	---	2.0-20	0
	8-21	4.5-6.0	0.5-3.0	---	2.0-20	0
	21-27	5.1-6.0	0.0-0.5	1.0-10	---	0
	27-43	5.1-6.0	0.0-0.5	1.0-10	---	0
	43-61	5.1-6.0	0.0-0.5	1.0-10	---	0
	61-80	5.6-6.5	0.0-0.5	1.0-10	---	0
354F: Schweitzer-----	0-1	3.5-5.5	2.0-5.0	---	2.0-20	0
	1-5	3.5-5.5	0.5-2.0	---	2.0-20	0
	5-8	4.5-6.0	2.0-5.0	---	2.0-20	0
	8-21	4.5-6.0	0.5-3.0	---	2.0-20	0
	21-27	5.1-6.0	0.0-0.5	1.0-10	---	0
	27-43	5.1-6.0	0.0-0.5	1.0-10	---	0
	43-61	5.1-6.0	0.0-0.5	1.0-10	---	0
	61-80	5.6-6.5	0.0-0.5	1.0-10	---	0
363C: Talus.						
Arcadian-----	0-2	4.5-6.0	50-90	---	94-150	0
	2-5	5.1-6.5	0.5-2.0	5.0-15	---	0
	5-12	5.1-6.5	2.0-5.0	5.0-15	---	0
	12-22	---	---	---	---	---
363D: Talus.						
Arcadian-----	0-2	4.5-6.0	50-90	---	94-150	0
	2-5	5.1-6.5	0.5-2.0	5.0-15	---	0
	5-12	5.1-6.5	2.0-5.0	5.0-15	---	0
	12-22	---	---	---	---	---
363E: Talus.						
Arcadian-----	0-2	4.5-6.0	50-90	---	94-150	0
	2-5	5.1-6.5	0.5-2.0	5.0-15	---	0
	5-12	5.1-6.5	2.0-5.0	5.0-15	---	0
	12-22	---	---	---	---	---

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
363F: Talus.						
Arcadian-----	0-2	4.5-6.0	50-90	---	94-150	0
	2-5	5.1-6.5	0.5-2.0	5.0-15	---	0
	5-12	5.1-6.5	2.0-5.0	5.0-15	---	0
	12-22	---	---	---	---	---
364F. Talus						
365F. Rock outcrop						
369C: Dishno-----	0-1	3.6-5.5	50-90	---	94-150	0
	1-3	3.5-5.5	2.0-5.0	---	2.0-10	0
	3-9	3.5-5.5	0.5-2.0	---	2.0-10	0
	9-10	3.5-5.5	2.0-5.0	---	2.0-10	0
	10-18	3.5-5.5	0.5-3.0	---	1.0-5.0	0
	18-22	3.5-5.5	0.5-3.0	---	1.0-5.0	0
	22-29	4.5-6.0	0.0-0.5	---	0.1-5.0	0
	29-46	4.5-6.0	0.0-0.5	---	0.1-5.0	0
	46-80	---	---	---	---	---
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
Peshekee-----	0-1	3.5-4.5	60-95	---	94-150	0
	1-4	4.5-6.0	2.0-6.0	10-33	---	0
	4-6	4.5-6.0	0.5-2.0	---	3.0-10	0
	6-9	4.5-6.0	1.0-3.0	---	3.0-10	0
	9-19	4.5-6.0	0.5-1.0	---	3.0-10	0
	19-80	---	---	---	---	---
Rock outcrop.						
369D: Dishno-----	0-1	3.6-5.5	50-90	---	94-150	0
	1-3	3.5-5.5	2.0-5.0	---	2.0-10	0
	3-9	3.5-5.5	0.5-2.0	---	2.0-10	0
	9-10	3.5-5.5	2.0-5.0	---	2.0-10	0
	10-18	3.5-5.5	0.5-3.0	---	1.0-5.0	0
	18-22	3.5-5.5	0.5-3.0	---	1.0-5.0	0
	22-29	4.5-6.0	0.0-0.5	---	0.1-5.0	0
	29-46	4.5-6.0	0.0-0.5	---	0.1-5.0	0
	46-80	---	---	---	---	---

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
369D:						
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
Peshekee-----	0-1	3.5-4.5	60-95	---	94-150	0
	1-4	4.5-6.0	2.0-6.0	10-33	---	0
	4-6	4.5-6.0	0.5-2.0	---	3.0-10	0
	6-9	4.5-6.0	1.0-3.0	---	3.0-10	0
	9-19	4.5-6.0	0.5-1.0	---	3.0-10	0
	19-80	---	---	---	---	---
Rock outcrop.						
369E:						
Michigamme-----	0-1	2.5-4.1	50-90	---	94-150	0
	1-2	3.5-5.5	2.0-5.0	---	0.1-15	0
	2-4	3.5-5.5	0.5-2.0	---	0.1-23	0
	4-7	3.5-5.5	2.0-5.0	---	0.1-15	0
	7-14	4.5-6.1	0.5-3.0	---	0.1-15	0
	14-20	5.1-6.5	0.5-3.0	---	0.1-15	0
	20-24	5.1-6.5	0.5-3.0	---	0.1-15	0
	24-31	5.1-6.5	0.0-0.5	---	0.1-10	0
	31-80	---	---	---	---	---
Schweitzer-----	0-1	3.5-5.5	2.0-5.0	---	2.0-20	0
	1-5	3.5-5.5	0.5-2.0	---	2.0-20	0
	5-8	4.5-6.0	2.0-5.0	---	2.0-20	0
	8-21	4.5-6.0	0.5-3.0	---	2.0-20	0
	21-27	5.1-6.0	0.0-0.5	1.0-10	---	0
	27-43	5.1-6.0	0.0-0.5	1.0-10	---	0
	43-61	5.1-6.0	0.0-0.5	1.0-10	---	0
	61-80	5.6-6.5	0.0-0.5	1.0-10	---	0
Peshekee-----	0-1	3.5-4.5	60-95	---	94-150	0
	1-4	4.5-6.0	2.0-6.0	10-33	---	0
	4-6	4.5-6.0	0.5-2.0	---	3.0-10	0
	6-9	4.5-6.0	1.0-3.0	---	3.0-10	0
	9-19	4.5-6.0	0.5-1.0	---	3.0-10	0
	19-80	---	---	---	---	---
Rock outcrop.						
369F:						
Michigamme-----	0-1	2.5-4.1	50-90	---	94-150	0
	1-2	3.5-5.5	2.0-5.0	---	0.1-15	0
	2-4	3.5-5.5	0.5-2.0	---	0.1-23	0
	4-7	3.5-5.5	2.0-5.0	---	0.1-15	0
	7-14	4.5-6.1	0.5-3.0	---	0.1-15	0
	14-20	5.1-6.5	0.5-3.0	---	0.1-15	0
	20-24	5.1-6.5	0.5-3.0	---	0.1-15	0
	24-31	5.1-6.5	0.0-0.5	---	0.1-10	0
	31-80	---	---	---	---	---

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
369F:						
Schweitzer-----	0-1	3.5-5.5	2.0-5.0	---	2.0-20	0
	1-5	3.5-5.5	0.5-2.0	---	2.0-20	0
	5-8	4.5-6.0	2.0-5.0	---	2.0-20	0
	8-21	4.5-6.0	0.5-3.0	---	2.0-20	0
	21-27	5.1-6.0	0.0-0.5	1.0-10	---	0
	27-43	5.1-6.0	0.0-0.5	1.0-10	---	0
	43-61	5.1-6.0	0.0-0.5	1.0-10	---	0
	61-80	5.6-6.5	0.0-0.5	1.0-10	---	0
Peshekee-----	0-1	3.5-4.5	60-95	---	94-150	0
	1-4	4.5-6.0	2.0-6.0	10-33	---	0
	4-6	4.5-6.0	0.5-2.0	---	3.0-10	0
	6-9	4.5-6.0	1.0-3.0	---	3.0-10	0
	9-19	4.5-6.0	0.5-1.0	---	3.0-10	0
	19-80	---	---	---	---	---
Rock outcrop.						
370E:						
Peshekee-----	0-1	3.5-4.5	60-95	---	94-150	0
	1-4	4.5-6.0	2.0-6.0	10-33	---	0
	4-6	4.5-6.0	0.5-2.0	---	3.0-10	0
	6-9	4.5-6.0	1.0-3.0	---	3.0-10	0
	9-19	4.5-6.0	0.5-1.0	---	3.0-10	0
	19-80	---	---	---	---	---
Rock outcrop.						
370F:						
Peshekee-----	0-1	3.5-4.5	60-95	---	94-150	0
	1-4	4.5-6.0	2.0-6.0	10-33	---	0
	4-6	4.5-6.0	0.5-2.0	---	3.0-10	0
	6-9	4.5-6.0	1.0-3.0	---	3.0-10	0
	9-19	4.5-6.0	0.5-1.0	---	3.0-10	0
	19-80	---	---	---	---	---
Rock outcrop.						
375.						
Dumps and Pits, mine						
380:						
Beseman-----	0-2	3.6-5.5	50-90	---	94-150	0
	2-9	2.5-4.1	50-90	---	94-150	0
	9-28	3.9-4.8	50-90	---	94-150	0
	28-35	3.9-4.8	50-90	---	94-150	0
	35-44	3.9-4.8	50-90	---	94-150	0
	44-47	3.5-7.3	2.0-5.0	---	0.0-34	0
	47-57	3.5-7.3	0.5-2.0	---	0.8-32	0
	57-67	3.5-7.3	0.5-1.0	---	0.0-26	0
	67-80	3.5-7.3	0.0-0.5	---	0.0-15	0
Greenwood-----	0-8	3.5-4.5	50-90	---	94-150	0
	8-11	3.5-4.5	50-90	---	94-150	0
	11-65	3.5-4.5	50-90	---	94-150	0
	65-80	3.5-4.5	50-90	---	94-150	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
382:						
Cathro-----	0-6	3.9-4.8	50-90	---	94-150	0
	6-31	3.9-4.8	50-90	---	94-150	0
	31-80	5.6-8.4	0.0-0.5	4.0-14	---	0-30
Arnheim-----	0-5	4.5-7.3	2.0-4.0	5.0-20	---	0
	5-10	5.1-7.3	0.2-1.0	2.0-12	---	0
	10-80	5.6-7.3	0.1-0.5	1.0-10	---	0
388:						
Gay-----	0-4	4.5-6.0	75-90	---	94-150	0
	4-7	5.1-6.5	2.0-30	---	4.0-65	0
	7-11	5.1-6.5	0.5-2.0	2.0-10	---	0
	11-16	5.1-6.5	0.5-1.0	3.0-22	---	0
	16-30	5.6-7.3	0.0-0.5	3.0-8.0	---	0
	30-80	5.6-7.3	0.0-0.5	3.0-8.0	---	0
Tula-----	0-1	3.9-4.8	50-90	---	94-150	0
	1-5	5.1-6.1	2.0-5.0	---	1.3-10	0
	5-8	5.1-6.1	0.5-3.0	6.0-12	---	0
	8-20	5.1-6.1	0.5-3.0	6.0-12	---	0
	20-28	5.1-6.1	0.5-3.0	6.0-12	---	0
	28-37	5.1-6.5	0.5-1.0	4.0-16	---	0
	37-62	5.6-6.5	0.5-1.0	4.0-16	---	0
	62-80	5.6-6.5	0.0-0.5	1.8-15	---	0
398B:						
Tula-----	0-1	3.9-4.8	50-90	---	94-150	0
	1-5	5.1-6.1	2.0-5.0	---	1.3-10	0
	5-8	5.1-6.1	0.5-3.0	6.0-12	---	0
	8-20	5.1-6.1	0.5-3.0	6.0-12	---	0
	20-28	5.1-6.1	0.5-3.0	6.0-12	---	0
	28-37	5.1-6.5	0.5-1.0	4.0-16	---	0
	37-62	5.6-6.5	0.5-1.0	4.0-16	---	0
	62-80	5.6-6.5	0.0-0.5	1.8-15	---	0
Gay-----	0-4	4.5-6.0	75-90	---	94-150	0
	4-7	5.1-6.5	2.0-30	---	4.0-65	0
	7-11	5.1-6.5	0.5-2.0	2.0-10	---	0
	11-16	5.1-6.5	0.5-1.0	3.0-22	---	0
	16-30	5.6-7.3	0.0-0.5	3.0-8.0	---	0
	30-80	5.6-7.3	0.0-0.5	3.0-8.0	---	0
Wakefield-----	0-1	3.5-4.4	50-90	---	94-150	0
	1-4	4.5-6.5	2.0-5.0	---	4.2-15	0
	4-7	4.5-6.5	0.5-2.0	---	0.0-26	0
	7-10	4.5-6.5	2.0-5.0	---	4.2-15	0
	10-16	4.5-6.5	0.5-3.0	---	0.1-11	0
	16-26	4.5-6.5	0.0-0.5	---	0.1-10	0
	26-54	4.5-6.5	0.0-0.5	---	0.1-14	0
	54-70	4.5-6.5	0.0-0.5	---	0.1-10	0
	70-80	4.5-6.5	0.0-0.5	0.0-16	---	0
418:						
Loxley-----	0-5	2.5-4.1	70-90	---	94-150	0
	5-26	3.9-4.8	50-90	---	94-150	0
	26-45	3.9-4.8	50-90	---	94-150	0
	45-80	3.6-5.5	65-85	---	94-150	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
418: Beseman-----	0-2	3.6-5.5	50-90	---	94-150	0
	2-9	2.5-4.1	50-90	---	94-150	0
	9-28	3.9-4.8	50-90	---	94-150	0
	28-35	3.9-4.8	50-90	---	94-150	0
	35-44	3.9-4.8	50-90	---	94-150	0
	44-47	3.5-7.3	2.0-5.0	---	0.0-34	0
	47-57	3.5-7.3	0.5-2.0	---	0.8-32	0
	57-67	3.5-7.3	0.5-1.0	---	0.0-26	0
	67-80	3.5-7.3	0.0-0.5	---	0.0-15	0
419: Pleine-----	0-9	3.9-4.8	50-90	---	94-150	0
	9-20	5.1-6.5	0.5-5.0	6.0-16	---	0
	20-33	5.1-6.5	0.2-0.5	6.0-11	---	0
	33-80	5.6-6.5	0.1-0.5	6.0-11	---	0
Cathro-----	0-6	3.9-4.8	50-90	---	94-150	0
	6-31	3.9-4.8	50-90	---	94-150	0
	31-80	5.6-8.4	0.0-0.5	4.0-14	---	0-30
Gay-----	0-4	4.5-6.0	75-90	---	94-150	0
	4-7	5.1-6.5	2.0-30	---	4.0-65	0
	7-11	5.1-6.5	0.5-2.0	2.0-10	---	0
	11-16	5.1-6.5	0.5-1.0	3.0-22	---	0
	16-30	5.6-7.3	0.0-0.5	3.0-8.0	---	0
	30-80	5.6-7.3	0.0-0.5	3.0-8.0	---	0
424: Gay-----	0-4	4.5-5.5	50-90	---	94-150	0
	4-7	5.1-6.5	2.0-30	---	4.0-65	0
	7-11	5.1-6.5	0.5-2.0	2.0-10	---	0
	11-16	5.1-6.5	0.5-1.0	3.0-22	---	0
	16-30	5.6-7.3	0.0-0.5	3.0-8.0	---	0
	30-80	5.6-7.3	0.0-0.5	3.0-8.0	---	0
425: Foxpaw-----	0-1	3.5-4.4	50-90	---	80-120	0
	1-3	3.5-4.8	50-90	---	50-75	0
	3-8	3.5-5.0	0.5-2.0	---	1.5-16	0
	8-15	4.5-5.5	2.0-5.0	---	2.8-14	0
	15-23	4.5-5.5	0.5-3.0	---	1.3-12	0
	23-32	4.5-5.5	0.0-0.5	---	0.6-8.3	0
	32-80	4.5-5.5	0.0-0.5	---	0.6-8.3	0
Gay-----	0-4	4.5-5.5	50-90	---	94-150	0
	4-7	5.1-6.5	2.0-30	---	4.0-65	0
	7-11	5.1-6.5	0.5-2.0	2.0-10	---	0
	11-16	5.1-6.5	0.5-1.0	3.0-22	---	0
	16-30	5.6-7.3	0.0-0.5	3.0-8.0	---	0
	30-80	5.6-7.3	0.0-0.5	3.0-8.0	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
428C:						
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
Michigamme-----	0-1	2.5-4.1	50-90	---	94-150	0
	1-2	3.5-5.5	2.0-5.0	---	0.1-15	0
	2-4	3.5-5.5	0.5-2.0	---	0.1-23	0
	4-7	3.5-5.5	2.0-5.0	---	0.1-15	0
	7-14	4.5-6.1	0.5-3.0	---	0.1-15	0
	14-20	5.1-6.5	0.5-3.0	---	0.1-15	0
	20-24	5.1-6.5	0.5-3.0	---	0.1-15	0
	24-31	5.1-6.5	0.0-0.5	---	0.1-10	0
	31-80	---	---	---	---	---
428D:						
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
Michigamme-----	0-1	2.5-4.1	50-90	---	94-150	0
	1-2	3.5-5.5	2.0-5.0	---	0.1-15	0
	2-4	3.5-5.5	0.5-2.0	---	0.1-23	0
	4-7	3.5-5.5	2.0-5.0	---	0.1-15	0
	7-14	4.5-6.1	0.5-3.0	---	0.1-15	0
	14-20	5.1-6.5	0.5-3.0	---	0.1-15	0
	20-24	5.1-6.5	0.5-3.0	---	0.1-15	0
	24-31	5.1-6.5	0.0-0.5	---	0.1-10	0
	31-80	---	---	---	---	---
429B:						
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
Peshekee-----	0-1	3.5-4.5	60-95	---	94-150	0
	1-4	4.5-6.0	2.0-6.0	10-33	---	0
	4-6	4.5-6.0	0.5-2.0	---	3.0-10	0
	6-9	4.5-6.0	1.0-3.0	---	3.0-10	0
	9-19	4.5-6.0	0.5-1.0	---	3.0-10	0
	19-80	---	---	---	---	---

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
429C: Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
Peshekee-----	0-1	3.5-4.5	60-95	---	94-150	0
	1-4	4.5-6.0	2.0-6.0	10-33	---	0
	4-6	4.5-6.0	0.5-2.0	---	3.0-10	0
	6-9	4.5-6.0	1.0-3.0	---	3.0-10	0
	9-19	4.5-6.0	0.5-1.0	---	3.0-10	0
	19-80	---	---	---	---	---
429D: Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
Peshekee-----	0-1	3.5-4.5	60-95	---	94-150	0
	1-4	4.5-6.0	2.0-6.0	10-33	---	0
	4-6	4.5-6.0	0.5-2.0	---	3.0-10	0
	6-9	4.5-6.0	1.0-3.0	---	3.0-10	0
	9-19	4.5-6.0	0.5-1.0	---	3.0-10	0
	19-80	---	---	---	---	---
429E: Schweitzer-----	0-1	3.5-5.5	2.0-5.0	---	2.0-20	0
	1-5	3.5-5.5	0.5-2.0	---	2.0-20	0
	5-8	4.5-6.0	2.0-5.0	---	2.0-20	0
	8-21	4.5-6.0	0.5-3.0	---	2.0-20	0
	21-27	5.1-6.0	0.0-0.5	1.0-10	---	0
	27-43	5.1-6.0	0.0-0.5	1.0-10	---	0
	43-61	5.1-6.0	0.0-0.5	1.0-10	---	0
	61-80	5.6-6.5	0.0-0.5	1.0-10	---	0
Peshekee-----	0-1	3.5-4.5	60-95	---	94-150	0
	1-4	4.5-6.0	2.0-6.0	10-33	---	0
	4-6	4.5-6.0	0.5-2.0	---	3.0-10	0
	6-9	4.5-6.0	1.0-3.0	---	3.0-10	0
	9-19	4.5-6.0	0.5-1.0	---	3.0-10	0
	19-80	---	---	---	---	---

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
430B: Stutts-----	0-1	3.6-5.5	40-70	---	94-150	0
	1-6	4.5-5.2	0.5-2.0	1.0-4.0	---	0
	6-8	4.8-5.9	1.0-5.0	---	1.0-5.0	0
	8-15	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	15-18	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	18-28	5.5-6.5	0.0-0.5	---	0.5-4.0	0
	28-80	5.5-6.5	0.0-0.3	0.1-2.0	---	0
430C: Stutts-----	0-1	3.6-5.5	40-70	---	94-150	0
	1-6	4.5-5.2	0.5-2.0	1.0-4.0	---	0
	6-8	4.8-5.9	1.0-5.0	---	1.0-5.0	0
	8-15	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	15-18	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	18-28	5.5-6.5	0.0-0.5	---	0.5-4.0	0
	28-80	5.5-6.5	0.0-0.3	0.1-2.0	---	0
430D: Stutts-----	0-1	3.6-5.5	40-70	---	94-150	0
	1-6	4.5-5.2	0.5-2.0	1.0-4.0	---	0
	6-8	4.8-5.9	1.0-5.0	---	1.0-5.0	0
	8-15	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	15-18	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	18-28	5.5-6.5	0.0-0.5	---	0.5-4.0	0
	28-80	5.5-6.5	0.0-0.3	0.1-2.0	---	0
430E: Stutts-----	0-1	3.6-5.5	40-70	---	94-150	0
	1-6	4.5-5.2	0.5-2.0	1.0-4.0	---	0
	6-8	4.8-5.9	1.0-5.0	---	1.0-5.0	0
	8-15	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	15-18	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	18-28	5.5-6.5	0.0-0.5	---	0.5-4.0	0
	28-80	5.5-6.5	0.0-0.3	0.1-2.0	---	0
432C: Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
Michigamme-----	0-1	2.5-4.1	50-90	---	94-150	0
	1-2	3.5-5.5	2.0-5.0	---	0.1-15	0
	2-4	3.5-5.5	0.5-2.0	---	0.1-23	0
	4-7	3.5-5.5	2.0-5.0	---	0.1-15	0
	7-14	4.5-6.1	0.5-3.0	---	0.1-15	0
	14-20	5.1-6.5	0.5-3.0	---	0.1-15	0
	20-24	5.1-6.5	0.5-3.0	---	0.1-15	0
	24-31	5.1-6.5	0.0-0.5	---	0.1-10	0
	31-80	---	---	---	---	---
Rock outcrop.						

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
432D:						
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
Michigamme-----	0-1	2.5-4.1	50-90	---	94-150	0
	1-2	3.5-5.5	2.0-5.0	---	0.1-15	0
	2-4	3.5-5.5	0.5-2.0	---	0.1-23	0
	4-7	3.5-5.5	2.0-5.0	---	0.1-15	0
	7-14	4.5-6.1	0.5-3.0	---	0.1-15	0
	14-20	5.1-6.5	0.5-3.0	---	0.1-15	0
	20-24	5.1-6.5	0.5-3.0	---	0.1-15	0
	24-31	5.1-6.5	0.0-0.5	---	0.1-10	0
	31-80	---	---	---	---	---
Rock outcrop.						
432E:						
Schweitzer-----	0-1	3.5-5.5	2.0-5.0	---	2.0-20	0
	1-5	3.5-5.5	0.5-2.0	---	2.0-20	0
	5-8	4.5-6.0	2.0-5.0	---	2.0-20	0
	8-21	4.5-6.0	0.5-3.0	---	2.0-20	0
	21-27	5.1-6.0	0.0-0.5	1.0-10	---	0
	27-43	5.1-6.0	0.0-0.5	1.0-10	---	0
	43-61	5.1-6.0	0.0-0.5	1.0-10	---	0
	61-80	5.6-6.5	0.0-0.5	1.0-10	---	0
Michigamme-----	0-1	2.5-4.1	50-90	---	94-150	0
	1-2	3.5-5.5	2.0-5.0	---	0.1-15	0
	2-4	3.5-5.5	0.5-2.0	---	0.1-23	0
	4-7	3.5-5.5	2.0-5.0	---	0.1-15	0
	7-14	4.5-6.1	0.5-3.0	---	0.1-15	0
	14-20	5.1-6.5	0.5-3.0	---	0.1-15	0
	20-24	5.1-6.5	0.5-3.0	---	0.1-15	0
	24-31	5.1-6.5	0.0-0.5	---	0.1-10	0
	31-80	---	---	---	---	---
Rock outcrop.						
432F:						
Schweitzer-----	0-1	3.5-5.5	2.0-5.0	---	2.0-20	0
	1-5	3.5-5.5	0.5-2.0	---	2.0-20	0
	5-8	4.5-6.0	2.0-5.0	---	2.0-20	0
	8-21	4.5-6.0	0.5-3.0	---	2.0-20	0
	21-27	5.1-6.0	0.0-0.5	1.0-10	---	0
	27-43	5.1-6.0	0.0-0.5	1.0-10	---	0
	43-61	5.1-6.0	0.0-0.5	1.0-10	---	0
	61-80	5.6-6.5	0.0-0.5	1.0-10	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
432F:						
Michigamme-----	0-1	2.5-4.1	50-90	---	94-150	0
	1-2	3.5-5.5	2.0-5.0	---	0.1-15	0
	2-4	3.5-5.5	0.5-2.0	---	0.1-23	0
	4-7	3.5-5.5	2.0-5.0	---	0.1-15	0
	7-14	4.5-6.1	0.5-3.0	---	0.1-15	0
	14-20	5.1-6.5	0.5-3.0	---	0.1-15	0
	20-24	5.1-6.5	0.5-3.0	---	0.1-15	0
	24-31	5.1-6.5	0.0-0.5	---	0.1-10	0
	31-80	---	---	---	---	---
Rock outcrop.						
433B:						
McMillan-----	0-1	3.6-5.5	50-100	---	94-150	0
	1-2	4.0-5.5	2.0-6.0	---	0.3-7.7	0
	2-5	4.0-5.5	0.5-2.0	---	0.0-9.7	0
	5-9	4.0-5.5	0.8-4.0	---	0.2-6.4	0
	9-14	4.0-5.5	0.2-1.0	---	0.1-3.9	0
	14-19	4.0-5.5	0.2-0.8	---	0.1-3.6	0
	19-29	5.0-6.0	0.1-0.5	0.5-3.0	---	0
	29-72	5.0-6.0	0.1-0.5	0.5-3.0	---	0
	72-80	5.0-7.0	0.0-0.2	0.1-1.0	---	0
433C:						
McMillan-----	0-1	3.6-5.5	50-100	---	94-150	0
	1-2	4.0-5.5	2.0-6.0	---	0.3-7.7	0
	2-5	4.0-5.5	0.5-2.0	---	0.0-9.7	0
	5-9	4.0-5.5	0.8-4.0	---	0.2-6.4	0
	9-14	4.0-5.5	0.2-1.0	---	0.1-3.9	0
	14-19	4.0-5.5	0.2-0.8	---	0.1-3.6	0
	19-29	5.0-6.0	0.1-0.5	0.5-3.0	---	0
	29-72	5.0-6.0	0.1-0.5	0.5-3.0	---	0
	72-80	5.0-7.0	0.0-0.2	0.1-1.0	---	0
433D:						
McMillan-----	0-1	3.6-5.5	50-100	---	94-150	0
	1-2	4.0-5.5	2.0-6.0	---	0.3-7.7	0
	2-5	4.0-5.5	0.5-2.0	---	0.0-9.7	0
	5-9	4.0-5.5	0.8-4.0	---	0.2-6.4	0
	9-14	4.0-5.5	0.2-1.0	---	0.1-3.9	0
	14-19	4.0-5.5	0.2-0.8	---	0.1-3.6	0
	19-29	5.0-6.0	0.1-0.5	0.5-3.0	---	0
	29-72	5.0-6.0	0.1-0.5	0.5-3.0	---	0
	72-80	5.0-7.0	0.0-0.2	0.1-1.0	---	0
435C:						
Kalkaska-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-6	3.6-5.5	0.5-2.0	---	1.0-15	0
	6-8	3.6-5.5	2.0-5.0	---	4.0-15	0
	8-17	4.5-6.0	0.5-3.0	---	2.0-5.0	0
	17-32	4.5-6.0	0.0-0.5	---	1.0-3.0	0
	32-80	4.5-6.0	0.0-0.5	---	1.0-3.0	0
Waiska-----	0-1	3.5-5.5	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	1.0-6.0	0
	4-8	3.5-6.0	2.0-5.0	---	4.0-12	0
	8-18	3.5-6.0	0.5-3.0	---	1.0-8.0	0
	18-35	5.1-6.0	0.0-0.5	---	0.0-3.0	0
	35-61	5.1-6.0	0.0-0.5	---	0.0-3.0	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
435D:						
Kalkaska-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-6	3.6-5.5	0.5-2.0	---	1.0-15	0
	6-8	3.6-5.5	2.0-5.0	---	4.0-15	0
	8-17	4.5-6.0	0.5-3.0	---	2.0-5.0	0
	17-32	4.5-6.0	0.0-0.5	---	1.0-3.0	0
	32-80	4.5-6.0	0.0-0.5	---	1.0-3.0	0
Waiska-----	0-1	3.5-5.5	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	1.0-6.0	0
	4-8	3.5-6.0	2.0-5.0	---	4.0-12	0
	8-18	3.5-6.0	0.5-3.0	---	1.0-8.0	0
	18-35	5.1-6.0	0.0-0.5	---	0.0-3.0	0
	35-61	5.1-6.0	0.0-0.5	---	0.0-3.0	0
435E:						
Kalkaska-----	0-2	3.9-4.8	50-90	---	94-150	0
	2-6	3.6-5.5	0.5-2.0	---	1.0-15	0
	6-8	3.6-5.5	2.0-5.0	---	4.0-15	0
	8-17	4.5-6.0	0.5-3.0	---	2.0-5.0	0
	17-32	4.5-6.0	0.0-0.5	---	1.0-3.0	0
	32-80	4.5-6.0	0.0-0.5	---	1.0-3.0	0
Waiska-----	0-1	3.5-5.5	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	1.0-6.0	0
	4-8	3.5-6.0	2.0-5.0	---	4.0-12	0
	8-18	3.5-6.0	0.5-3.0	---	1.0-8.0	0
	18-35	5.1-6.0	0.0-0.5	---	0.0-3.0	0
	35-61	5.1-6.0	0.0-0.5	---	0.0-3.0	0
437B:						
Manitowish-----	0-1	2.5-4.1	60-95	---	94-150	0
	1-2	3.9-4.8	50-90	---	94-150	0
	2-4	4.0-5.5	0.5-2.0	---	3.0-9.0	0
	4-5	4.0-5.5	2.0-5.0	---	3.0-8.0	0
	5-11	4.5-5.5	0.5-3.0	---	3.0-8.0	0
	11-22	4.5-5.5	0.5-1.0	---	3.0-8.0	0
	22-40	4.5-5.5	0.0-0.5	---	1.0-3.0	0
	40-80	5.1-6.5	0.0-0.5	---	1.0-3.0	0
Channing-----	0-2	---	50-90	---	94-150	0
	2-6	4.5-6.0	1.0-3.0	---	3.0-15	0
	6-7	4.5-6.0	1.0-3.0	---	3.0-15	0
	7-16	4.5-6.0	0.5-1.0	---	1.0-10	0
	16-24	4.5-6.0	0.5-1.0	---	1.0-10	0
	24-29	5.1-6.5	0.0-0.5	1.0-2.0	---	0
	29-62	5.1-6.5	0.0-0.5	1.0-2.0	---	0
448F:						
Rockland-----	0-1	2.5-4.1	50-90	---	94-150	0
	1-5	5.1-6.0	2.0-5.0	1.1-8.6	---	0
	5-22	5.2-6.5	0.5-1.0	4.6-17	---	0
	22-80	6.6-8.5	0.1-0.5	7.6-20	---	0-1
Rock outcrop.						

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
449C:						
Flintsteel-----	0-1	2.5-4.1	40-60	---	94-150	0
	1-5	4.5-7.3	2.0-5.0	---	10-50	0
	5-9	4.5-6.0	0.5-2.0	---	5.0-10	0
	9-12	4.5-6.0	0.5-1.0	---	5.0-10	0
	12-16	4.5-6.0	0.5-1.0	---	5.0-10	0
	16-22	4.8-6.5	0.5-1.0	7.0-15	---	0
	22-36	5.1-8.3	0.1-0.5	9.0-15	---	0-2
	36-48	7.9-8.5	0.1-0.5	5.0-11	---	5-20
	48-80	7.9-8.6	0.1-0.5	5.0-10	---	2-15
Minocqua-----	0-4	4.5-7.8	30-60	120-190	---	0
	4-15	4.5-7.8	0.0-2.0	2.0-20	---	0
	15-28	4.5-6.5	0.0-0.5	1.0-15	---	0
	28-60	4.5-6.5	0.0-0.5	0.0-6.0	---	0
452F:						
Rockland-----	0-1	2.5-4.1	50-90	---	94-150	0
	1-5	5.1-6.0	2.0-5.0	1.1-8.6	---	0
	5-23	5.2-6.5	0.5-1.0	4.6-17	---	0
	23-80	6.6-8.5	0.1-0.5	7.6-20	---	0-1
460B:						
Belding-----	0-1	3.9-4.8	50-90	---	94-150	0
	1-4	5.1-6.0	1.0-6.0	6.0-20	---	0
	4-9	5.1-6.0	1.0-4.0	4.0-15	---	0
	9-14	5.1-6.0	0.2-1.0	1.0-10	---	0
	14-19	5.1-6.0	0.2-1.0	1.0-10	---	0
	19-22	5.1-6.0	0.2-1.0	1.0-10	---	0
	22-34	7.4-8.5	0.1-0.5	5.0-15	---	0-5
	34-36	7.4-8.5	0.1-0.5	5.0-15	---	0-15
	36-80	7.4-8.5	0.1-0.5	5.0-15	---	0-20
Manido-----	0-3	3.6-5.5	50-90	---	94-150	0
	3-9	3.5-4.4	0.5-2.0	---	1.0-2.0	0
	9-11	3.0-4.4	2.0-5.0	---	1.0-2.0	0
	11-17	3.5-5.2	0.5-3.0	---	3.0-7.0	0
	17-37	3.5-5.5	0.0-0.5	---	1.0-3.0	0
	37-60	3.5-5.5	0.0-0.5	---	1.0-3.0	0
	60-80	3.5-6.0	0.0-0.5	---	1.0-3.0	0
461B:						
Loggerhead-----	0-4	4.0-5.5	2.0-6.0	---	3.0-10	0
	4-5	4.0-5.5	1.0-5.0	---	2.0-8.0	0
	5-15	4.0-5.5	0.5-3.0	---	1.0-8.0	0
	15-38	4.0-6.0	0.2-1.0	---	1.0-8.0	0
	38-56	5.1-7.3	0.2-0.5	---	3.0-12	0
	56-80	5.3-7.8	0.1-0.5	---	3.0-10	0
462C:						
Nonesuch-----	0-1	3.6-5.5	50-90	---	94-150	0
	1-4	4.0-5.0	0.5-2.0	---	5.0-15	0
	4-11	4.5-5.0	0.5-2.0	---	5.0-15	0
	11-16	4.5-5.0	0.1-0.5	---	5.0-15	0
	16-23	4.5-6.0	0.1-0.5	---	4.0-10	0
	23-34	4.5-6.0	0.1-0.5	---	4.0-10	0
	34-50	5.0-7.3	0.0-0.5	---	3.0-10	0
	50	---	---	---	---	---
Rock outcrop.						

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
509:						
Cathro-----	0-6	3.9-4.8	50-90	---	94-150	0
	6-31	3.9-4.8	50-90	---	94-150	0
	31-80	5.6-8.4	0.0-0.5	4.0-14	---	0-30
Minocqua-----	0-4	4.5-7.8	30-60	120-190	---	0
	4-15	4.5-7.8	0.0-2.0	2.0-20	---	0
	15-28	4.5-6.5	0.0-0.5	1.0-15	---	0
	28-60	4.5-6.5	0.0-0.5	0.0-6.0	---	0
511A:						
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
Tula-----	0-1	3.9-4.8	50-90	---	94-150	0
	1-5	5.1-6.1	2.0-5.0	---	1.3-10	0
	5-8	5.1-6.1	0.5-3.0	6.0-12	---	0
	8-20	5.1-6.1	0.5-3.0	6.0-12	---	0
	20-28	5.1-6.1	0.5-3.0	6.0-12	---	0
	28-37	5.1-6.5	0.5-1.0	4.0-16	---	0
	37-62	5.6-6.5	0.5-1.0	4.0-16	---	0
	62-80	5.6-6.5	0.0-0.5	1.8-15	---	0
Chabeneau-----	0-1	3.5-6.0	50-90	---	94-150	0
	1-2	3.5-6.0	1.0-3.0	---	3.4-20	0
	2-5	3.5-6.0	0.7-3.0	---	3.4-20	0
	5-10	4.5-6.0	0.0-1.1	---	0.1-4.0	0
	10-22	4.5-6.0	0.0-0.4	---	0.1-4.0	0
	22-30	5.1-6.5	0.0-0.2	1.0-5.0	0.1-4.0	0
	30-48	5.1-6.5	0.0-0.1	1.0-5.0	0.1-4.0	0
	48-121	5.1-6.5	0.0-0.0	1.0-5.0	0.1-4.0	0
519B:						
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
519C:						
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0
519D:						
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0
522.						
Pits, sand and gravel						
523D:						
Gogebic, sandy substratum-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	0.0-4.6	1.0-5.0	0
Karlin-----	0-1	3.6-5.5	50-80	---	94-150	0
	1-4	2.7-6.0	0.5-2.0	---	1.0-6.0	0
	4-15	2.7-5.5	2.0-5.0	---	1.0-6.0	0
	15-29	5.0-6.5	0.0-0.5	---	0.0-3.0	0
	29-80	5.0-6.5	0.0-0.5	0.0-4.0	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
524C:						
Waiska-----	0-1	3.5-5.5	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	1.0-6.0	0
	4-8	3.5-6.0	2.0-5.0	---	4.0-12	0
	8-18	3.5-6.0	0.5-3.0	---	1.0-8.0	0
	18-35	5.1-6.0	0.0-0.5	---	0.0-3.0	0
	35-61	5.1-6.0	0.0-0.5	---	0.0-3.0	0
Amasa-----	0-1	3.5-6.0	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	0.5-19	0
	4-7	3.5-6.0	2.0-5.0	---	0.5-14	0
	7-23	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	23-28	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	28-41	4.5-6.5	0.0-0.5	---	0.0-2.6	0
	41-80	4.5-6.5	0.0-0.5	---	0.0-2.6	0
524D:						
Waiska-----	0-1	3.5-5.5	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	1.0-6.0	0
	4-8	3.5-6.0	2.0-5.0	---	4.0-12	0
	8-18	3.5-6.0	0.5-3.0	---	1.0-8.0	0
	18-35	5.1-6.0	0.0-0.5	---	0.0-3.0	0
	35-61	5.1-6.0	0.0-0.5	---	0.0-3.0	0
Amasa-----	0-1	3.5-6.0	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	0.5-19	0
	4-7	3.5-6.0	2.0-5.0	---	0.5-14	0
	7-23	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	23-28	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	28-41	4.5-6.5	0.0-0.5	---	0.0-2.6	0
	41-80	4.5-6.5	0.0-0.5	---	0.0-2.6	0
524E:						
Waiska-----	0-1	3.5-5.5	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	1.0-6.0	0
	4-8	3.5-6.0	2.0-5.0	---	4.0-12	0
	8-18	3.5-6.0	0.5-3.0	---	1.0-8.0	0
	18-35	5.1-6.0	0.0-0.5	---	0.0-3.0	0
	35-61	5.1-6.0	0.0-0.5	---	0.0-3.0	0
Amasa-----	0-1	3.5-6.0	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	0.5-19	0
	4-7	3.5-6.0	2.0-5.0	---	0.5-14	0
	7-23	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	23-28	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	28-41	4.5-6.5	0.0-0.5	---	0.0-2.6	0
	41-80	4.5-6.5	0.0-0.5	---	0.0-2.6	0
527B:						
Wakefield-----	0-1	3.5-4.4	50-90	---	94-150	0
	1-4	4.5-6.5	2.0-5.0	---	4.2-15	0
	4-7	4.5-6.5	0.5-2.0	---	0.0-26	0
	7-10	4.5-6.5	2.0-5.0	---	4.2-15	0
	10-16	4.5-6.5	0.5-3.0	---	0.1-11	0
	16-26	4.5-6.5	0.0-0.5	---	0.1-10	0
	26-54	4.5-6.5	0.0-0.5	---	0.1-14	0
	54-70	4.5-6.5	0.0-0.5	---	0.1-10	0
	70-80	4.5-6.5	0.0-0.5	0.0-16	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
527C:						
Wakefield-----	0-1	3.5-4.4	50-90	---	94-150	0
	1-4	4.5-6.5	2.0-5.0	---	4.2-15	0
	4-7	4.5-5.0	0.5-2.0	---	0.0-26	0
	7-10	4.5-5.0	2.0-5.0	---	4.2-15	0
	10-16	4.5-5.0	0.5-3.0	---	0.1-11	0
	16-26	5.1-5.5	0.0-0.5	---	0.1-10	0
	26-54	5.1-5.5	0.0-0.5	---	0.1-14	0
	54-70	5.1-5.5	0.0-0.5	---	0.1-10	0
	70-80	5.6-6.0	0.0-0.5	0.0-16	---	0
527D:						
Wakefield-----	0-1	3.5-4.4	50-90	---	94-150	0
	1-4	4.5-6.5	2.0-5.0	---	4.2-15	0
	4-7	4.5-5.0	0.5-2.0	---	0.0-26	0
	7-10	4.5-5.0	2.0-5.0	---	4.2-15	0
	10-16	4.5-5.0	0.5-3.0	---	0.1-11	0
	16-26	5.1-5.5	0.0-0.5	---	0.1-10	0
	26-54	5.1-5.5	0.0-0.5	---	0.1-14	0
	54-70	5.1-5.5	0.0-0.5	---	0.1-10	0
	70-80	5.6-6.0	0.0-0.5	0.0-16	---	0
528B:						
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
Annalake-----	0-9	3.5-6.0	2.0-5.0	---	3.0-20	0
	9-16	4.5-6.0	0.5-2.0	---	3.0-10	0
	16-31	4.5-6.0	0.2-1.0	---	1.0-5.0	0
	31-48	5.1-7.3	0.1-0.5	1.0-10	---	0
	48-61	5.1-7.3	0.1-0.5	1.0-10	---	0
	61-80	5.5-8.2	0.1-0.5	1.0-5.0	---	0
528C:						
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
Annalake-----	0-9	3.5-6.0	2.0-5.0	---	3.0-20	0
	9-16	4.5-6.0	0.5-2.0	---	3.0-10	0
	16-31	4.5-6.0	0.2-1.0	---	1.0-5.0	0
	31-48	5.1-7.3	0.1-0.5	1.0-10	---	0
	48-61	5.1-7.3	0.1-0.5	1.0-10	---	0
	61-80	5.5-8.2	0.1-0.5	1.0-5.0	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
528D: Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
Annalake-----	0-9	3.5-6.0	2.0-5.0	---	3.0-20	0
	9-16	4.5-6.0	0.5-2.0	---	3.0-10	0
	16-31	4.5-6.0	0.2-1.0	---	1.0-5.0	0
	31-48	5.1-7.3	0.1-0.5	1.0-10	---	0
	48-61	5.1-7.3	0.1-0.5	1.0-10	---	0
	61-80	5.5-8.2	0.1-0.5	1.0-5.0	---	0
551B: Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0
Dishno-----	0-1	3.6-5.5	50-90	---	94-150	0
	1-3	3.5-5.5	2.0-5.0	---	2.0-10	0
	3-9	3.5-5.5	0.5-2.0	---	2.0-10	0
	9-10	3.5-5.5	2.0-5.0	---	2.0-10	0
	10-18	3.5-5.5	0.5-3.0	---	1.0-5.0	0
	18-22	3.5-5.5	0.5-3.0	---	1.0-5.0	0
	22-29	4.5-6.0	0.0-0.5	---	0.1-5.0	0
	29-46	4.5-6.0	0.0-0.5	---	0.1-5.0	0
	46-80	---	---	---	---	---
566. Beach, rubbly						
576B: Flintsteel-----	0-1	2.5-4.1	40-60	---	94-150	0
	1-5	4.5-7.3	2.0-5.0	---	10-50	0
	5-9	4.5-6.0	0.5-2.0	---	5.0-10	0
	9-12	4.5-6.0	0.5-1.0	---	5.0-10	0
	12-16	4.5-6.0	0.5-1.0	---	5.0-10	0
	16-22	4.8-6.5	0.5-1.0	7.0-15	---	0
	22-36	5.1-8.3	0.1-0.5	9.0-15	---	0-2
	36-48	7.9-8.5	0.1-0.5	5.0-11	---	5-20
	48-80	7.9-8.6	0.1-0.5	5.0-10	---	2-15
Loggerhead-----	0-4	4.0-5.5	2.0-6.0	---	3.0-10	0
	4-5	4.0-5.5	1.0-5.0	---	2.0-8.0	0
	5-15	4.0-5.5	0.5-3.0	---	1.0-8.0	0
	15-38	4.0-6.0	0.2-1.0	---	1.0-8.0	0
	38-56	5.1-7.3	0.2-0.5	---	3.0-12	0
	56-80	5.3-7.8	0.1-0.5	---	3.0-10	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
576C:						
Flintsteel-----	0-1	2.5-4.1	40-60	---	94-150	0
	1-5	4.5-7.3	2.0-5.0	---	10-50	0
	5-9	4.5-6.0	0.5-2.0	---	5.0-10	0
	9-12	4.5-6.0	0.5-1.0	---	5.0-10	0
	12-16	4.5-6.0	0.5-1.0	---	5.0-10	0
	16-22	4.8-6.5	0.5-1.0	7.0-15	---	0
	22-36	5.1-8.3	0.1-0.5	9.0-15	---	0-2
	36-48	7.9-8.5	0.1-0.5	5.0-11	---	5-20
	48-80	7.9-8.6	0.1-0.5	5.0-10	---	2-15
Loggerhead-----	0-4	4.0-5.5	2.0-6.0	---	3.0-10	0
	4-5	4.0-5.5	1.0-5.0	---	2.0-8.0	0
	5-15	4.0-5.5	0.5-3.0	---	1.0-8.0	0
	15-38	4.0-6.0	0.2-1.0	---	1.0-8.0	0
	38-56	5.1-7.3	0.2-0.5	---	3.0-12	0
	56-80	5.3-7.8	0.1-0.5	---	3.0-10	0
576D:						
Flintsteel-----	0-1	2.5-4.1	40-60	---	94-150	0
	1-5	4.5-7.3	2.0-5.0	---	10-50	0
	5-9	4.5-6.0	0.5-2.0	---	5.0-10	0
	9-12	4.5-6.0	0.5-1.0	---	5.0-10	0
	12-16	4.5-6.0	0.5-1.0	---	5.0-10	0
	16-22	4.8-6.5	0.5-1.0	7.0-15	---	0
	22-36	5.1-8.3	0.1-0.5	9.0-15	---	0-2
	36-48	7.9-8.5	0.1-0.5	5.0-11	---	5-20
	48-80	7.9-8.6	0.1-0.5	5.0-10	---	2-15
Loggerhead-----	0-4	4.0-5.5	2.0-6.0	---	3.0-10	0
	4-5	4.0-5.5	1.0-5.0	---	2.0-8.0	0
	5-15	4.0-5.5	0.5-3.0	---	1.0-8.0	0
	15-38	4.0-6.0	0.2-1.0	---	1.0-8.0	0
	38-56	5.1-7.3	0.2-0.5	---	3.0-12	0
	56-80	5.3-7.8	0.1-0.5	---	3.0-10	0
577B:						
Loggerhead-----	0-4	4.0-5.5	2.0-6.0	---	3.0-10	0
	4-5	4.0-5.5	1.0-5.0	---	2.0-8.0	0
	5-15	4.0-5.5	0.5-3.0	---	1.0-8.0	0
	15-38	4.0-6.0	0.2-1.0	---	1.0-8.0	0
	38-56	5.1-7.3	0.2-0.5	---	3.0-12	0
	56-80	5.3-7.8	0.1-0.5	---	3.0-10	0
Chabeneau-----	0-1	3.5-6.0	50-90	---	94-150	0
	1-2	3.5-6.0	1.0-3.0	---	3.4-20	0
	2-5	3.5-6.0	0.7-3.0	---	3.4-20	0
	5-10	4.5-6.0	0.0-1.1	---	0.1-4.0	0
	10-22	4.5-6.0	0.0-0.4	---	0.1-4.0	0
	22-30	5.1-6.5	0.0-0.2	1.0-5.0	0.1-4.0	0
	30-48	5.1-6.5	0.0-0.1	1.0-5.0	0.1-4.0	0
	48-121	5.1-6.5	0.0-0.0	1.0-5.0	0.1-4.0	0
Arcadian-----	0-2	4.5-6.0	50-90	---	94-150	0
	2-5	5.1-6.5	0.5-2.0	5.0-15	---	0
	5-12	5.1-6.5	2.0-5.0	5.0-15	---	0
	12-22	---	---	---	---	---

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
577C:						
Loggerhead-----	0-4	4.0-5.5	2.0-6.0	---	3.0-10	0
	4-5	4.0-5.5	1.0-5.0	---	2.0-8.0	0
	5-15	4.0-5.5	0.5-3.0	---	1.0-8.0	0
	15-38	4.0-6.0	0.2-1.0	---	1.0-8.0	0
	38-56	5.1-7.3	0.2-0.5	---	3.0-12	0
	56-80	5.3-7.8	0.1-0.5	---	3.0-10	0
Chabeneau-----	0-1	3.5-6.0	50-90	---	94-150	0
	1-2	3.5-6.0	1.0-3.0	---	3.4-20	0
	2-5	3.5-6.0	0.7-3.0	---	3.4-20	0
	5-10	4.5-6.0	0.0-1.1	---	0.1-4.0	0
	10-22	4.5-6.0	0.0-0.4	---	0.1-4.0	0
	22-30	5.1-6.5	0.0-0.2	1.0-5.0	0.1-4.0	0
	30-48	5.1-6.5	0.0-0.1	1.0-5.0	0.1-4.0	0
	48-121	5.1-6.5	0.0-0.0	1.0-5.0	0.1-4.0	0
Arcadian-----	0-2	4.5-6.0	50-90	---	94-150	0
	2-5	5.1-6.5	0.5-2.0	5.0-15	---	0
	5-12	5.1-6.5	2.0-5.0	5.0-15	---	0
	12-22	---	---	---	---	---
577D:						
Loggerhead-----	0-4	4.0-5.5	2.0-6.0	---	3.0-10	0
	4-5	4.0-5.5	1.0-5.0	---	2.0-8.0	0
	5-15	4.0-5.5	0.5-3.0	---	1.0-8.0	0
	15-38	4.0-6.0	0.2-1.0	---	1.0-8.0	0
	38-56	5.1-7.3	0.2-0.5	---	3.0-12	0
	56-80	5.3-7.8	0.1-0.5	---	3.0-10	0
Chabeneau-----	0-1	3.5-6.0	50-90	---	94-150	0
	1-2	3.5-6.0	1.0-3.0	---	3.4-20	0
	2-5	3.5-6.0	0.7-3.0	---	3.4-20	0
	5-10	4.5-6.0	0.0-1.1	---	0.1-4.0	0
	10-22	4.5-6.0	0.0-0.4	---	0.1-4.0	0
	22-30	5.1-6.5	0.0-0.2	1.0-5.0	0.1-4.0	0
	30-48	5.1-6.5	0.0-0.1	1.0-5.0	0.1-4.0	0
	48-121	5.1-6.5	0.0-0.0	1.0-5.0	0.1-4.0	0
Arcadian-----	0-2	4.5-6.0	50-90	---	94-150	0
	2-5	5.1-6.5	0.5-2.0	5.0-15	---	0
	5-12	5.1-6.5	2.0-5.0	5.0-15	---	0
	12-22	---	---	---	---	---
578D:						
Arcadian-----	0-2	4.5-6.0	50-90	---	94-150	0
	2-5	5.1-6.5	0.5-2.0	5.0-15	---	0
	5-12	5.1-6.5	2.0-5.0	5.0-15	---	0
	12-22	---	---	---	---	---
Keweenaw-----	0-2	3.5-5.6	50-90	---	94-150	0
	2-4	4.5-6.5	0.5-2.0	2.0-10	---	0
	4-6	4.5-6.0	2.0-5.0	---	1.5-6.0	0
	6-25	5.0-6.0	0.5-3.0	2.0-8.0	---	0
	25-45	5.0-6.1	0.5-2.5	1.0-3.0	---	0
	45-56	5.0-6.1	0.0-0.5	1.0-3.0	---	0
	56-71	5.0-6.1	0.0-0.5	0.5-3.0	---	0
	71-90	5.0-6.1	0.0-0.5	0.5-5.0	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
625B: Fence-----	0-6	3.6-6.0	1.0-2.0	4.0-20	---	0
	6-7	3.6-6.5	0.5-1.0	---	2.0-15	0
	7-13	3.6-6.0	0.8-2.0	---	3.0-15	0
	13-15	4.5-7.5	0.0-0.5	2.0-15	---	0
	15-20	5.0-7.5	0.0-0.5	2.0-15	---	0
	20-35	5.5-7.8	0.0-0.5	2.0-15	---	0
	35-80	6.5-8.4	0.0-0.5	2.0-15	---	0
625C: Fence-----	0-6	3.6-6.0	1.0-2.0	4.0-20	---	0
	6-7	3.6-6.5	0.5-1.0	---	2.0-15	0
	7-13	3.6-6.0	0.8-2.0	---	3.0-15	0
	13-15	4.5-7.5	0.0-0.5	2.0-15	---	0
	15-20	5.0-7.5	0.0-0.5	2.0-15	---	0
	20-35	5.5-7.8	0.0-0.5	2.0-15	---	0
	35-80	6.5-8.4	0.0-0.5	2.0-15	---	0
626D: Sporley-----	0-6	3.6-6.0	1.0-2.0	4.0-20	---	0
	6-7	4.9-5.9	0.5-2.0	---	2.0-6.0	0
	7-12	5.2-5.9	0.5-3.0	2.0-6.0	---	0
	12-15	4.9-5.9	0.5-2.0	---	1.0-5.0	0
	15-24	5.0-6.0	0.5-1.0	---	2.0-8.0	0
	24-30	5.0-6.0	0.0-1.0	4.0-12	---	0
	30-80	5.5-6.5	0.0-0.5	---	2.0-8.0	0
626E: Sporley-----	0-6	3.6-6.0	1.0-2.0	4.0-20	---	0
	6-7	4.9-5.9	0.5-2.0	---	2.0-6.0	0
	7-12	5.2-5.9	0.5-3.0	2.0-6.0	---	0
	12-15	4.9-5.9	0.5-2.0	---	1.0-5.0	0
	15-24	5.0-6.0	0.5-1.0	---	2.0-8.0	0
	24-30	5.0-6.0	0.0-1.0	4.0-12	---	0
	30-80	5.5-6.5	0.0-0.5	---	2.0-8.0	0
648B: Annalake-----	0-9	3.5-6.0	2.0-5.0	---	3.0-20	0
	9-16	4.5-6.0	0.5-2.0	---	3.0-10	0
	16-31	4.5-6.0	0.2-1.0	---	1.0-5.0	0
	31-48	5.1-7.3	0.1-0.5	1.0-10	---	0
	48-61	5.1-7.3	0.1-0.5	1.0-10	---	0
	61-80	5.5-8.2	0.1-0.5	1.0-5.0	---	0
648C: Annalake-----	0-9	3.5-6.0	2.0-5.0	---	3.0-20	0
	9-16	4.5-6.0	0.5-2.0	---	3.0-10	0
	16-31	4.5-6.0	0.2-1.0	---	1.0-5.0	0
	31-48	5.1-7.3	0.1-0.5	1.0-10	---	0
	48-61	5.1-7.3	0.1-0.5	1.0-10	---	0
	61-80	5.5-8.2	0.1-0.5	1.0-5.0	---	0
650: Leafriver-----	0-1	4.5-7.3	50-90	---	125-200	0
	1-14	4.5-7.3	50-90	---	125-200	0
	14-16	3.5-7.3	0.0-0.5	10-50	---	0
	16-51	3.5-7.3	0.0-0.5	1.0-15	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
652B:						
Manido-----	0-3	3.6-5.5	50-90	---	94-150	0
	3-9	3.5-4.4	0.5-2.0	---	1.0-2.0	0
	9-11	3.0-4.4	2.0-5.0	---	1.0-2.0	0
	11-17	3.5-5.2	0.5-3.0	---	3.0-7.0	0
	17-37	3.5-5.5	0.0-0.5	---	1.0-3.0	0
	37-60	3.5-5.5	0.0-0.5	---	1.0-3.0	0
	60-80	3.5-6.0	0.0-0.5	---	1.0-3.0	0
Annalake-----	0-9	3.5-6.0	2.0-5.0	---	3.0-20	0
	9-16	4.5-6.0	0.5-2.0	---	3.0-10	0
	16-31	4.5-6.0	0.2-1.0	---	1.0-5.0	0
	31-48	5.1-7.3	0.1-0.5	1.0-10	---	0
	48-61	5.1-7.3	0.1-0.5	1.0-10	---	0
	61-80	5.5-8.2	0.1-0.5	1.0-5.0	---	0
656B:						
Stutts-----	0-1	3.6-5.5	40-70	---	94-150	0
	1-6	4.5-5.2	0.5-2.0	1.0-4.0	---	0
	6-8	4.8-5.9	1.0-5.0	---	1.0-5.0	0
	8-15	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	15-18	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	18-28	5.5-6.5	0.0-0.5	---	0.5-4.0	0
	28-80	5.5-6.5	0.0-0.3	0.1-2.0	---	0
Zandi-----	0-0.5	3.6-5.5	50-90	---	94-150	0
	0.5-4	5.1-6.7	0.5-2.0	0.1-5.2	---	0
	4-6	4.6-5.5	0.5-1.0	---	2.4-8.1	0
	6-34	4.9-5.5	0.5-1.0	---	2.4-8.1	0
	34-42	4.5-5.4	0.0-0.5	---	1.0-5.1	0
	42-57	4.5-5.4	0.0-0.5	---	1.2-8.1	0
	57-80	4.5-5.4	0.0-0.5	---	1.2-8.1	0
656C:						
Stutts-----	0-1	3.6-5.5	40-70	---	94-150	0
	1-6	4.5-5.2	0.5-2.0	1.0-4.0	---	0
	6-8	4.8-5.9	1.0-5.0	---	1.0-5.0	0
	8-15	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	15-18	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	18-28	5.5-6.5	0.0-0.5	---	0.5-4.0	0
	28-80	5.5-6.5	0.0-0.3	0.1-2.0	---	0
Zandi-----	0-0.5	3.6-5.5	50-90	---	94-150	0
	0.5-4	5.1-6.7	0.5-2.0	0.1-5.2	---	0
	4-6	4.6-5.5	0.5-1.0	---	2.4-8.1	0
	6-34	4.9-5.5	0.5-1.0	---	2.4-8.1	0
	34-42	4.5-5.4	0.0-0.5	---	1.0-5.1	0
	42-57	4.5-5.4	0.0-0.5	---	1.2-8.1	0
	57-80	4.5-5.4	0.0-0.5	---	1.2-8.1	0
656D:						
Stutts-----	0-1	3.6-5.5	40-70	---	94-150	0
	1-6	4.5-5.2	0.5-2.0	1.0-4.0	---	0
	6-8	4.8-5.9	1.0-5.0	---	1.0-5.0	0
	8-15	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	15-18	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	18-28	5.5-6.5	0.0-0.5	---	0.5-4.0	0
	28-80	5.5-6.5	0.0-0.3	0.1-2.0	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
656D:						
Zandi-----	0-0.5	3.6-5.5	50-90	---	94-150	0
	0.5-4	5.1-6.7	0.5-2.0	0.1-5.2	---	0
	4-6	4.6-5.5	0.5-1.0	---	2.4-8.1	0
	6-34	4.9-5.5	0.5-1.0	---	2.4-8.1	0
	34-42	4.5-5.4	0.0-0.5	---	1.0-5.1	0
	42-57	4.5-5.4	0.0-0.5	---	1.2-8.1	0
	57-80	4.5-5.4	0.0-0.5	---	1.2-8.1	0
680B:						
Tonkey-----	0-6	5.1-5.9	2.0-5.0	35-45	---	0
	6-9	5.1-5.9	2.0-5.0	35-45	---	0
	9-18	5.1-5.9	0.0-0.5	2.0-10	---	0
	18-28	5.1-5.9	0.0-0.5	2.0-10	---	0
	28-37	5.1-5.9	0.0-0.5	2.0-10	---	0
	37-67	5.1-6.0	0.0-0.5	1.0-10	---	0
	67-80	5.1-6.0	0.0-0.5	1.0-10	---	0
Pleine-----	0-9	3.9-4.8	50-90	---	94-150	0
	9-20	5.1-6.5	0.5-5.0	4.0-16	---	0
	20-33	5.1-6.5	0.2-0.5	6.0-11	---	0
	33-80	5.6-6.5	0.1-0.5	6.0-11	---	0
Annalake-----	0-9	3.5-6.0	2.0-5.0	---	3.0-20	0
	9-16	4.5-6.0	0.5-2.0	---	3.0-10	0
	16-31	4.5-6.0	0.2-1.0	---	1.0-5.0	0
	31-48	5.1-7.3	0.1-0.5	1.0-10	---	0
	48-61	5.1-7.3	0.1-0.5	1.0-10	---	0
	61-80	5.5-8.2	0.1-0.5	1.0-5.0	---	0
681:						
Cathro-----	0-6	3.9-4.8	50-90	---	94-150	0
	6-31	3.9-4.8	50-90	---	94-150	0
	31-80	5.6-8.4	0.0-0.5	4.0-14	---	0-30
Tonkey-----	0-6	5.1-5.9	2.0-5.0	35-45	---	0
	6-9	5.1-5.9	2.0-5.0	35-45	---	0
	9-18	5.1-5.9	0.0-0.5	2.0-10	---	0
	18-28	5.1-5.9	0.0-0.5	2.0-10	---	0
	28-37	5.1-5.9	0.0-0.5	2.0-10	---	0
	37-67	5.1-6.0	0.0-0.5	1.0-10	---	0
	67-80	5.1-6.0	0.0-0.5	1.0-10	---	0
683B:						
Amasa-----	0-1	3.5-6.0	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	0.0-30	0
	4-7	3.5-6.0	2.0-5.0	---	0.5-14	0
	7-23	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	23-28	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	28-41	4.5-6.5	0.0-0.5	---	0.0-2.6	0
	41-80	4.5-6.5	0.0-0.5	---	0.0-2.6	0
Oldman-----	0-1	3.6-5.5	50-90	---	94-150	0
	1-3	4.0-5.0	2.0-5.0	---	5.0-15	0
	3-23	4.0-5.5	2.0-5.0	---	3.0-10	0
	23-28	5.0-6.0	0.1-0.5	---	1.0-6.0	0
	28-43	5.0-6.0	0.1-0.5	---	1.0-6.0	0
	43-58	5.0-6.5	0.0-0.5	---	1.0-6.0	0
	58-80	5.0-6.5	0.0-0.5	---	1.0-6.0	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
683C:						
Amasa-----	0-1	3.5-6.0	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	0.0-30	0
	4-7	3.5-6.0	2.0-5.0	---	0.5-14	0
	7-23	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	23-28	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	28-41	4.5-6.5	0.0-0.5	---	0.0-2.6	0
	41-80	4.5-6.5	0.0-0.5	---	0.0-2.6	0
Oldman-----	0-1	3.6-5.5	50-90	---	94-150	0
	1-3	4.0-5.0	2.0-5.0	---	5.0-15	0
	3-23	4.0-5.5	2.0-5.0	---	3.0-10	0
	23-28	5.0-6.0	0.1-0.5	---	1.0-6.0	0
	28-43	5.0-6.0	0.1-0.5	---	1.0-6.0	0
	43-58	5.0-6.5	0.0-0.5	---	1.0-6.0	0
	58-80	5.0-6.5	0.0-0.5	---	1.0-6.0	0
683D:						
Amasa-----	0-1	3.5-6.0	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	0.0-30	0
	4-7	3.5-6.0	2.0-5.0	---	0.5-14	0
	7-23	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	23-28	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	28-41	4.5-6.5	0.0-0.5	---	0.0-2.6	0
	41-80	4.5-6.5	0.0-0.5	---	0.0-2.6	0
Oldman-----	0-1	3.6-5.5	50-90	---	94-150	0
	1-3	4.0-5.0	2.0-5.0	---	5.0-15	0
	3-23	4.0-5.5	2.0-5.0	---	3.0-10	0
	23-28	5.0-6.0	0.1-0.5	---	1.0-6.0	0
	28-43	5.0-6.0	0.1-0.5	---	1.0-6.0	0
	43-58	5.0-6.5	0.0-0.5	---	1.0-6.0	0
	58-80	5.0-6.5	0.0-0.5	---	1.0-6.0	0
684B:						
Amasa-----	0-1	3.6-5.5	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	0.5-19	0
	4-7	3.5-6.0	2.0-5.0	---	1.9-11	0
	7-23	3.5-6.0	0.5-3.0	---	0.7-8.6	0
	23-28	3.5-6.0	0.5-3.0	---	0.7-8.6	0
	28-41	4.5-6.5	0.0-0.5	---	0.1-3.0	0
	41-80	4.5-6.5	0.0-0.5	---	0.1-3.0	0
684C:						
Amasa-----	0-1	3.5-6.0	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	0.5-19	0
	4-7	3.5-6.0	2.0-5.0	---	0.5-14	0
	7-23	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	23-28	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	28-41	4.5-6.5	0.0-0.5	---	0.0-2.6	0
	41-80	4.5-6.5	0.0-0.5	---	0.0-2.6	0
684D:						
Amasa-----	0-1	3.5-6.0	50-90	---	94-150	0
	1-4	3.5-6.0	0.5-2.0	---	0.5-19	0
	4-7	3.5-6.0	2.0-5.0	---	0.5-14	0
	7-23	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	23-28	3.5-6.0	0.5-3.0	---	0.9-8.9	0
	28-41	4.5-6.5	0.0-0.5	---	0.0-2.6	0
	41-80	4.5-6.5	0.0-0.5	---	0.0-2.6	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
686B:						
Annalake-----	0-9	3.5-6.0	2.0-5.0	---	3.0-20	0
	9-16	4.5-6.0	0.5-2.0	---	3.0-10	0
	16-31	4.5-6.0	0.2-1.0	---	1.0-5.0	0
	31-48	5.1-7.3	0.1-0.5	1.0-10	---	0
	48-61	5.1-7.3	0.1-0.5	1.0-10	---	0
	61-80	5.5-8.2	0.1-0.5	1.0-5.0	---	0
Robago-----	0-6	5.0-6.0	2.0-5.0	5.0-7.0	---	0
	6-9	5.0-5.9	0.5-2.0	4.0-6.0	---	0
	9-15	5.1-5.9	0.5-3.0	4.0-11	---	0
	15-22	5.2-6.1	0.5-1.0	4.0-11	---	0
	22-39	5.7-6.4	0.0-0.5	4.0-11	---	0
	39-80	5.7-6.5	0.0-0.5	4.0-9.0	---	0
688:						
Cathro-----	0-6	3.9-4.8	50-90	---	94-150	0
	6-31	3.9-4.8	50-90	---	94-150	0
	31-80	5.6-8.4	0.0-0.5	4.0-14	---	0-30
Leafriver-----	0-1	4.5-7.3	50-90	---	125-200	0
	1-14	4.5-7.3	50-90	---	125-200	0
	14-16	3.5-7.3	0.0-0.5	10-50	---	0
	16-51	3.5-7.3	0.0-0.5	1.0-15	---	0
689B:						
Chabeneau-----	0-1	3.5-6.0	50-90	---	94-150	0
	1-2	3.5-6.0	1.0-3.0	---	3.4-20	0
	2-5	3.5-6.0	0.7-3.0	---	3.4-20	0
	5-10	4.5-6.0	0.0-1.1	---	0.1-4.0	0
	10-22	4.5-6.0	0.0-0.4	---	0.1-4.0	0
	22-30	5.1-6.5	0.0-0.2	1.0-5.0	0.1-4.0	0
	30-48	5.1-6.5	0.0-0.1	1.0-5.0	0.1-4.0	0
	48-121	5.1-6.5	0.0-0.0	1.0-5.0	0.1-4.0	0
Channing-----	0-2	---	50-90	---	94-150	0
	2-6	4.5-6.0	1.0-3.0	---	3.0-15	0
	6-7	4.5-6.0	1.0-3.0	---	3.0-15	0
	7-16	4.5-6.0	0.5-1.0	---	1.0-10	0
	16-24	4.5-6.0	0.5-1.0	---	1.0-10	0
	24-29	5.1-6.5	0.0-0.5	1.0-2.0	---	0
	29-62	5.1-6.5	0.0-0.5	1.0-2.0	---	0
Gogebic-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	---	1.0-5.0	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
691B:						
Dishno-----	0-1	3.6-5.5	50-90	---	94-150	0
	1-3	3.5-5.5	2.0-5.0	---	2.0-10	0
	3-9	3.5-5.5	0.5-2.0	---	2.0-10	0
	9-10	3.5-5.5	2.0-5.0	---	2.0-10	0
	10-18	3.5-5.5	0.5-3.0	---	1.0-5.0	0
	18-22	3.5-5.5	0.5-3.0	---	1.0-5.0	0
	22-29	4.5-6.0	0.0-0.5	---	0.1-5.0	0
	29-46	4.5-6.0	0.0-0.5	---	0.1-5.0	0
	46-80	---	---	---	---	---
Tula-----	0-1	3.9-4.8	50-90	---	94-150	0
	1-5	5.1-6.1	2.0-5.0	---	1.3-10	0
	5-8	5.1-6.1	0.5-3.0	6.0-12	---	0
	8-20	5.1-6.1	0.5-3.0	6.0-12	---	0
	20-28	5.1-6.1	0.5-3.0	6.0-12	---	0
	28-37	5.1-6.5	0.5-1.0	4.0-16	---	0
	37-62	5.6-6.5	0.5-1.0	4.0-16	---	0
	62-80	5.6-6.5	0.0-0.5	1.8-15	---	0
Rock outcrop.						
691D:						
Dishno-----	0-1	3.6-5.5	50-90	---	94-150	0
	1-3	3.5-5.5	2.0-5.0	---	2.0-10	0
	3-9	3.5-5.5	0.5-2.0	---	2.0-10	0
	9-10	3.5-5.5	2.0-5.0	---	2.0-10	0
	10-18	3.5-5.5	0.5-3.0	---	1.0-5.0	0
	18-22	3.5-5.5	0.5-3.0	---	1.0-5.0	0
	22-29	4.5-6.0	0.0-0.5	---	0.1-5.0	0
	29-46	4.5-6.0	0.0-0.5	---	0.1-5.0	0
	46-80	---	---	---	---	---
Tula-----	0-1	3.9-4.8	50-90	---	94-150	0
	1-5	5.1-6.1	2.0-5.0	---	1.3-10	0
	5-8	5.1-6.1	0.5-3.0	6.0-12	---	0
	8-20	5.1-6.1	0.5-3.0	6.0-12	---	0
	20-28	5.1-6.1	0.5-3.0	6.0-12	---	0
	28-37	5.1-6.5	0.5-1.0	4.0-16	---	0
	37-62	5.6-6.5	0.5-1.0	4.0-16	---	0
	62-80	5.6-6.5	0.0-0.5	1.8-15	---	0
Rock outcrop.						
693B:						
Chabeneau-----	0-1	3.5-6.0	50-90	---	94-150	0
	1-2	3.5-6.0	1.0-3.0	---	3.4-20	0
	2-5	3.5-6.0	0.7-3.0	---	3.4-20	0
	5-10	4.5-6.0	0.0-1.1	---	0.1-4.0	0
	10-22	4.5-6.0	0.0-0.4	---	0.1-4.0	0
	22-30	5.1-6.5	0.0-0.2	1.0-5.0	0.1-4.0	0
	30-48	5.1-6.5	0.0-0.1	1.0-5.0	0.1-4.0	0
	48-121	5.1-6.5	0.0-0.0	1.0-5.0	0.1-4.0	0
Annalake-----	0-9	3.5-6.0	2.0-5.0	---	3.0-20	0
	9-16	4.5-6.0	0.5-2.0	---	3.0-10	0
	16-31	4.5-6.0	0.2-1.0	---	1.0-5.0	0
	31-48	5.1-7.3	0.1-0.5	1.0-10	---	0
	48-61	5.1-7.3	0.1-0.5	1.0-10	---	0
	61-80	5.5-8.2	0.1-0.5	1.0-5.0	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
694D:						
Annalake-----	0-9	3.5-6.0	2.0-5.0	---	3.0-20	0
	9-16	4.5-6.0	0.5-2.0	---	3.0-10	0
	16-31	4.5-6.0	0.2-1.0	---	1.0-5.0	0
	31-48	5.1-7.3	0.1-0.5	1.0-10	---	0
	48-61	5.1-7.3	0.1-0.5	1.0-10	---	0
	61-80	5.5-8.2	0.1-0.5	1.0-5.0	---	0
Stutts-----	0-1	3.6-5.5	40-70	---	94-150	0
	1-6	4.5-5.2	0.5-2.0	1.0-4.0	---	0
	6-8	4.8-5.9	1.0-5.0	---	1.0-5.0	0
	8-15	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	15-18	4.9-5.9	0.2-2.0	0.5-6.0	---	0
	18-28	5.5-6.5	0.0-0.5	---	0.5-4.0	0
	28-80	5.5-6.5	0.0-0.3	0.1-2.0	---	0
Arnheim-----	0-5	5.1-7.3	2.0-4.0	5.0-20	---	0
	5-10	5.1-7.3	0.2-1.0	2.0-10	---	0
	10-80	5.1-7.3	0.0-0.5	1.0-6.3	---	0
5170:						
Minocqua-----	0-4	4.5-7.8	30-60	120-190	---	0
	4-15	4.5-7.8	0.0-2.0	2.0-20	---	0
	15-28	4.5-6.5	0.0-0.5	1.0-15	---	0
	28-60	4.5-6.5	0.0-0.5	0.0-6.0	---	0
Pleine-----	0-9	3.9-4.8	50-90	---	94-150	0
	9-20	5.1-6.5	0.5-5.0	6.0-16	---	0
	20-33	5.1-6.5	0.2-0.5	6.0-11	---	0
	33-80	5.6-6.5	0.1-0.5	6.0-11	---	0
Cathro-----	0-6	3.9-4.8	50-90	---	94-150	0
	6-31	3.9-4.8	50-90	---	94-150	0
	31-80	5.6-8.4	0.0-0.5	4.0-14	---	0-30
5171B:						
Tula-----	0-1	4.5-6.5	30-80	---	94-150	0
	1-5	5.1-6.5	1.0-3.0	---	3.0-13	0
	5-8	5.1-6.5	0.5-1.0	2.0-8.0	---	0
	8-20	5.1-6.5	0.5-1.0	2.0-10	---	0
	20-28	5.1-6.5	0.5-1.0	2.0-10	---	0
	28-37	5.1-6.0	0.0-0.5	1.0-8.0	---	0
	37-62	5.6-6.5	0.5-1.0	4.0-16	---	0
	62-80	5.6-6.5	0.0-0.5	4.0-10	---	0
Wormet-----	0-1	3.6-5.5	60-85	---	94-150	0
	1-2	4.5-6.0	2.0-5.0	---	5.0-25	0
	2-6	4.5-6.0	0.5-2.0	---	2.0-15	0
	6-8	4.5-6.0	2.0-3.0	---	5.0-20	0
	8-19	4.5-6.0	1.0-2.0	---	3.0-15	0
	19-60	5.1-6.5	0.0-0.5	0.0-6.0	---	0

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
5171B: Gogebic, sandy substratum-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	0.0-4.6	1.0-5.0	0
5172B: Gogebic, sandy substratum-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	0.0-4.6	1.0-5.0	0
Pence-----	0-2	3.6-5.5	50-90	---	94-150	0
	2-6	4.5-6.0	0.5-2.0	---	0.5-17	0
	6-9	4.5-6.0	0.5-3.0	---	1.6-11	0
	9-13	4.5-6.0	0.5-3.0	---	1.6-11	0
	13-16	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	16-31	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	31-80	5.1-6.5	0.0-0.5	0.5-3.0	---	0
Cathro-----	0-6	3.9-4.8	50-90	---	94-150	0
	6-31	3.9-4.8	50-90	---	94-150	0
	31-80	5.6-8.4	0.0-0.5	4.0-14	---	0-30
5172C: Gogebic, sandy substratum-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	0.0-4.6	1.0-5.0	0
Pence-----	0-2	3.6-5.5	50-90	---	94-150	0
	2-6	4.5-6.0	0.5-2.0	---	0.5-17	0
	6-9	4.5-6.0	0.5-3.0	---	1.6-11	0
	9-13	4.5-6.0	0.5-3.0	---	1.6-11	0
	13-16	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	16-31	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	31-80	5.1-6.5	0.0-0.5	0.5-3.0	---	0
Cathro-----	0-6	3.9-4.8	50-90	---	94-150	0
	6-31	3.9-4.8	50-90	---	94-150	0
	31-80	5.6-8.4	0.0-0.5	4.0-14	---	0-30

Soil Survey of Gogebic County, Michigan

Table 18.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation- exchange capacity	Effective cation- exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	meq/100 g	Pct
5172D: Gogebic, sandy substratum-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	0.0-4.6	1.0-5.0	0
Pence-----	0-2	3.6-5.5	50-90	---	94-150	0
	2-6	4.5-6.0	0.5-2.0	---	0.5-17	0
	6-9	4.5-6.0	0.5-3.0	---	1.6-11	0
	9-13	4.5-6.0	0.5-3.0	---	1.6-11	0
	13-16	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	16-31	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	31-80	5.1-6.5	0.0-0.5	0.5-3.0	---	0
Cathro-----	0-6	3.9-4.8	50-90	---	94-150	0
	6-31	3.9-4.8	50-90	---	94-150	0
	31-80	5.6-8.4	0.0-0.5	4.0-14	---	0-30
5173D: Gogebic, sandy substratum-----	0-1	3.0-4.1	50-90	---	94-150	0
	1-5	3.8-5.9	2.0-5.0	---	5.0-15	0
	5-8	3.8-5.9	0.5-2.0	---	5.0-15	0
	8-12	3.8-5.9	2.0-5.0	---	4.0-15	0
	12-20	3.8-5.9	0.5-3.0	---	4.0-10	0
	20-33	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	33-49	3.8-5.9	0.0-0.5	---	1.0-5.0	0
	49-54	5.1-6.5	0.0-0.5	---	1.0-5.0	0
	54-68	5.1-6.6	0.0-0.5	---	1.0-5.0	0
	68-80	5.1-6.6	0.0-0.5	0.0-4.6	1.0-5.0	0
Pence-----	0-2	3.6-5.5	50-90	---	94-150	0
	2-6	4.5-6.0	0.5-2.0	---	0.5-17	0
	6-9	4.5-6.0	0.5-3.0	---	1.6-11	0
	9-13	4.5-6.0	0.5-3.0	---	1.6-11	0
	13-16	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	16-31	4.5-6.5	0.0-0.5	1.0-3.0	---	0
	31-80	5.1-6.5	0.0-0.5	0.5-3.0	---	0

Table 19.--Soil Features

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated)

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
7: Histosols-----	---	---	---	---	8-26	16-51	High	High	Moderate
Aquents-----	---	---	---	---	---	---	High	High	High
10: Witbeck-----	---	---	---	---	---	---	High	High	Low
12A: Monico-----	---	---	---	---	---	---	High	High	High
13B: Argonne-----	Fragipan	20-40	8-16	Moderately cemented	---	---	High	Moderate	High
13C: Argonne-----	Fragipan	20-40	8-16	Moderately cemented	---	---	High	Moderate	High
13D: Argonne-----	Fragipan	20-40	8-16	Moderately cemented	---	---	High	Moderate	High
15B: Wabeno-----	Fragipan	20-39	15-60	Moderately cemented	---	---	Moderate	Moderate	Moderate
15C: Wabeno-----	Fragipan	20-39	15-60	Moderately cemented	---	---	Moderate	Moderate	Moderate
16A: Fence-----	---	---	---	---	---	---	High	Low	High
17B: Lode-----	---	---	---	---	---	---	Moderate	Moderate	High
17C: Lode-----	---	---	---	---	---	---	Moderate	Moderate	High

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
20B:									
Pence-----	---	---	---	---	---	---	Low	Low	Moderate
Lode-----	---	---	---	---	---	---	Moderate	Moderate	High
20C:									
Pence-----	---	---	---	---	---	---	Low	Low	Moderate
21:									
Minocqua-----	---	---	---	---	---	---	High	High	Moderate
Leafriver-----	---	---	---	---	---	---	Moderate	High	Moderate
23B:									
Chabeneau-----	---	---	---	---	---	---	Moderate	Low	Moderate
Karlin-----	---	---	---	---	---	---	Low	Low	High
Pence-----	---	---	---	---	---	---	Low	Low	Moderate
26B:									
Stambaugh-----	---	---	---	---	---	---	High	Moderate	Moderate
27:									
Lupton-----	---	---	---	---	6-18	50-55	High	High	Low
Tawas-----	---	---	---	---	8-25	16-50	High	High	Moderate
28:									
Dawson-----	---	---	---	---	8-25	16-50	High	High	High
Greenwood-----	---	---	---	---	6-18	50-55	High	High	High
Loxley-----	---	---	---	---	6-18	50-55	High	High	High
29B:									
Pence, very deep water table-----	---	---	---	---	---	---	Low	Low	Moderate
31:									
Evart-----	---	---	---	---	---	---	Moderate	High	High
Tawas-----	---	---	---	---	8-25	16-50	High	High	Moderate

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
32A: Net-----	Fragipan	15-30	6-37	Moderately cemented	---	---	High	High	High
35A: Beechwood-----	---	---	---	---	---	---	High	High	High
36: Gay-----	---	---	---	---	---	---	High	High	Moderate
Pleine-----	---	---	---	---	4-8	8-16	High	High	Moderate
37B: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Tula-----	Fragipan	15-30	10-56	Moderately cemented	---	---	High	High	Moderate
Lupton-----	---	---	---	---	6-18	50-55	High	High	Moderate
38B: Gogebic, sandy substratum-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
38C: Gogebic, sandy substratum-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
38D: Gogebic, sandy substratum-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
39B: Gogebic, sandy substratum-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
39C: Gogebic, sandy substratum-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
39D: Gogebic, sandy substratum-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
41: Lupton-----	---	---	---	---	6-18	50-55	High	High	Moderate
Pleine-----	---	---	---	---	4-8	8-16	High	High	Moderate
Cathro-----	---	---	---	---	8-25	16-50	High	High	Low
42: Ausable-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
Tawas-----	---	---	---	---	8-25	16-50	High	High	Moderate
43B: Karlin-----	---	---	---	---	---	---	Low	Low	High
Pence-----	---	---	---	---	---	---	Low	Low	High
43C: Karlin-----	---	---	---	---	---	---	Low	Low	High
Pence-----	---	---	---	---	---	---	Low	Low	High
43D: Karlin-----	---	---	---	---	---	---	Low	Low	High
Pence-----	---	---	---	---	---	---	Low	Low	High
44B: Karlin-----	---	---	---	---	---	---	Low	Low	High
Keweenaw-----	---	---	---	---	---	---	Low	Low	Moderate
Sarona, dense substratum-----	Dense material	61-79	1-19	Moderately cemented	---	---	Low	Low	Moderate
44C: Karlin-----	---	---	---	---	---	---	Low	Low	High
Keweenaw-----	---	---	---	---	---	---	Low	Low	Moderate

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
44C: Saronia, dense substratum-----	Dense material	61-79	1-19	Moderately cemented	---	---	Low	Low	Moderate
44D: Karlin-----	---	---	---	---	---	---	Low	Low	High
Keweenaw-----	---	---	---	---	---	---	Low	Low	Moderate
Saronia, dense substratum-----	Dense material	61-79	1-19	Moderately cemented	---	---	Low	Low	Moderate
46C: Amasa-----	---	---	---	---	---	---	Moderate	Moderate	High
Karlin-----	---	---	---	---	---	---	Low	Low	High
46D: Amasa-----	---	---	---	---	---	---	Moderate	Moderate	High
Karlin-----	---	---	---	---	---	---	Low	Low	High
46E: Amasa-----	---	---	---	---	---	---	Moderate	Moderate	High
Karlin-----	---	---	---	---	---	---	Low	Low	High
46F: Amasa-----	---	---	---	---	---	---	Moderate	Moderate	High
Karlin-----	---	---	---	---	---	---	Low	Low	High
47B: Karlin, very deep water table-----	---	---	---	---	---	---	Low	Low	High
Noseum-----	---	---	---	---	---	---	Low	Moderate	Moderate
Gay-----	---	---	---	---	---	---	High	High	Moderate
48C: Karlin-----	---	---	---	---	---	---	Low	Low	High
Michigamme-----	Lithic bedrock	20-40	40-60	Indurated	---	---	Moderate	Moderate	Moderate

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
48F: Karlin-----	---	---	---	---	---	---	Low	Low	High
Michigamme-----	Lithic bedrock	20-40	40-60	Indurated	---	---	Moderate	Moderate	Moderate
49B: Pelissier-----	---	---	---	---	---	---	Low	Low	High
Sarwet-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
49C: Pelissier-----	---	---	---	---	---	---	Low	Low	High
Sarwet-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
49D: Pelissier-----	---	---	---	---	---	---	Low	Low	High
52B: Pence-----	---	---	---	---	---	---	Low	Low	Moderate
Vilas-----	---	---	---	---	---	---	Low	Low	Moderate
52C: Pence-----	---	---	---	---	---	---	Low	Low	Moderate
Vilas-----	---	---	---	---	---	---	Low	Low	Moderate
53B: Manitowish-----	---	---	---	---	---	---	Low	Low	High
Croswell-----	---	---	---	---	---	---	Low	Low	Moderate
57B: Karlin-----	---	---	---	---	---	---	Low	Low	High
Manitowish-----	---	---	---	---	---	---	Low	Low	High
57C: Karlin-----	---	---	---	---	---	---	Low	Low	High
Manitowish-----	---	---	---	---	---	---	Low	Low	High

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
58B: Vilas, very deep water table-----	---	---	---	---	---	---	Low	Low	Moderate
Croswell-----	---	---	---	---	---	---	Low	Low	Moderate
Pence, very deep water table-----	---	---	---	---	---	---	Low	Low	Moderate
61: Tawas-----	---	---	---	---	8-25	16-50	High	High	Moderate
Kinross-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
62B: Pelkie-----	---	---	---	---	---	---	Moderate	High	High
83: Bowstring-----	---	---	---	---	8-25	16-50	High	Moderate	Moderate
141D: Oldman-----	Fragipan	16-30	20-72	Moderately cemented	---	---	Moderate	Moderate	Moderate
141E: Oldman-----	Fragipan	16-30	20-72	Moderately cemented	---	---	Moderate	Moderate	Moderate
141F: Porkies-----	Fragipan	40-60	10-20	Weakly cemented	---	---	Moderate	Low	Moderate
214B: Amnicon-----	---	---	---	---	---	---	Moderate	High	Moderate
Bergland-----	---	---	---	---	---	---	High	High	Low
216B: Amnicon-----	---	---	---	---	---	---	Moderate	High	Moderate
217A: Cuttre-----	---	---	---	---	---	---	High	High	Low
218: Bergland-----	---	---	---	---	---	---	High	High	Low

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
219B: Payseor-----	---	---	---	---	---	---	High	High	Moderate
Froberg-----	---	---	---	---	---	---	Moderate	High	Moderate
222: Matchwood-----	---	---	---	---	---	---	High	High	Low
225A: Cuttre-----	---	---	---	---	---	---	High	High	Low
Bergland-----	---	---	---	---	---	---	High	High	Low
226B: Froberg-----	---	---	---	---	---	---	Moderate	High	Moderate
230B: Moquah-----	---	---	---	---	---	---	Moderate	Moderate	Low
Arnheim-----	---	---	---	---	---	---	High	High	Moderate
231: Matchwood-----	---	---	---	---	---	---	High	High	Low
Dorval-----	---	---	---	---	8-25	16-50	Low	Moderate	Moderate
233: Schaat Creek-----	---	---	---	---	---	---	High	High	Moderate
239D: Miskoaki-----	---	---	---	---	---	---	Moderate	High	Moderate
277B: Kellogg, sandy substratum-----	---	---	---	---	---	---	Moderate	High	Moderate
Allendale-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
280B: Flintsteel-----	Dense material	25-40	40-55	---	---	---	Moderate	Moderate	Moderate
280C: Flintsteel-----	Dense material	25-40	40-55	---	---	---	Moderate	Moderate	Moderate

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
282B:									
Big Iron-----	Dense material	40-60	20-40	---	---	---	High	Moderate	Moderate
Flintsteel-----	Dense material	25-40	40-55	---	---	---	Moderate	Moderate	Moderate
283B:									
Loggerhead-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
Noseum-----	---	---	---	---	---	---	Low	Moderate	Moderate
Ubly-----	Dense material	40-60	20-40	---	---	---	Moderate	Moderate	High
283C:									
Loggerhead-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
Noseum-----	---	---	---	---	---	---	Low	Moderate	Moderate
Ubly-----	Dense material	40-60	20-40	---	---	---	Moderate	Moderate	High
284:									
Aquents-----	---	---	---	---	---	---	High	High	High
Gull Point-----	Dense material	40-60	20-40	---	---	---	High	High	Moderate
285F:									
Rockland-----	---	---	---	---	---	---	Moderate	Low	Moderate
Arnheim-----	---	---	---	---	---	---	High	High	Moderate
286A:									
Big Iron-----	Dense material	40-60	20-40	---	---	---	High	Moderate	Moderate
Belding-----	Dense material	30-60	20-50	---	---	---	High	High	Moderate
287:									
Trap Falls-----	Dense material	40-60	20-40	---	---	---	High	High	Moderate
Tonkey-----	---	---	---	---	---	---	High	Moderate	Moderate
289B:									
Amasa-----	---	---	---	---	---	---	Moderate	Moderate	High
290B:									
Flintsteel-----	Dense material	25-40	40-55	---	---	---	Moderate	Moderate	Moderate

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
290C: Flintsteel-----	Dense material	25-40	40-55	---	---	---	Moderate	Moderate	Moderate
291B: Kalkaska-----	---	---	---	---	---	---	Low	Low	High
291D: Kalkaska-----	---	---	---	---	---	---	Low	Low	High
292B: Manido-----	---	---	---	---	---	---	Low	Low	High
Richter-----	---	---	---	---	---	---	High	High	Moderate
293A: Wainola-----	---	---	---	---	---	---	Moderate	Low	High
Trap Falls-----	Dense material	40-60	20-40	---	---	---	High	High	Moderate
296B: Manido-----	---	---	---	---	---	---	Low	Low	High
Fence-----	---	---	---	---	---	---	High	Low	High
Gogebic, sandy substratum-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
296D: Manido-----	---	---	---	---	---	---	Low	Low	High
Sporley-----	---	---	---	---	---	---	High	Moderate	Moderate
Gogebic, sandy substratum-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
299B: Zandi-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
Amasa-----	---	---	---	---	---	---	Moderate	Moderate	High
Flintsteel-----	Dense material	25-40	40-55	---	---	---	Moderate	Moderate	Moderate

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
299C: Zandi-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
Amasa-----	---	---	---	---	---	---	Moderate	Moderate	High
Flintsteel-----	Dense material	25-40	40-55	---	---	---	Moderate	Moderate	Moderate
301A: Moodig-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
302B: Manitowish-----	---	---	---	---	---	---	Low	Low	High
302C: Manitowish-----	---	---	---	---	---	---	Low	Low	High
303: Bowstring-----	---	---	---	---	8-25	16-50	High	Moderate	Moderate
Arnheim-----	---	---	---	---	---	---	High	High	Moderate
305B: Keweenaw-----	---	---	---	---	---	---	Low	Low	Moderate
Siskiwit-----	---	---	---	---	---	---	Low	Moderate	Moderate
305C: Keweenaw-----	---	---	---	---	---	---	Low	Low	Moderate
Siskiwit-----	---	---	---	---	---	---	Low	Moderate	Moderate
307: Lupton-----	---	---	---	---	6-18	50-55	High	High	Moderate
Cathro-----	---	---	---	---	8-25	16-50	High	High	Low
309: Cathro-----	---	---	---	---	8-25	16-50	High	High	Low
310B: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
310C: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
310D: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
310E: Schweitzer-----	Fragipan	15-30	6-45	Moderately cemented	---	---	Moderate	Moderate	High
311B: Tula-----	Fragipan	15-30	10-56	Moderately cemented	---	---	High	High	Moderate
Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
312A: Tula-----	Fragipan	15-30	10-56	Moderately cemented	---	---	High	High	Moderate
Foxpaw-----	---	---	---	---	---	---	High	High	Moderate
Gay-----	---	---	---	---	---	---	High	High	Moderate
316: Gay-----	---	---	---	---	---	---	High	High	Moderate
317B: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	High	High
317C: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
317D: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
319B: McMillan-----	---	---	---	---	---	---	Low	Low	High
Noseum-----	---	---	---	---	---	---	Low	Moderate	Moderate

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
319C: McMillan-----	---	---	---	---	---	---	Low	Low	High
Islandlake-----	---	---	---	---	---	---	Low	Low	High
319D: McMillan-----	---	---	---	---	---	---	Low	Low	High
Islandlake-----	---	---	---	---	---	---	Low	Low	High
319E: McMillan-----	---	---	---	---	---	---	Low	Low	High
Islandlake-----	---	---	---	---	---	---	Low	Low	High
322B: Stutts-----	---	---	---	---	---	---	Low	Low	Moderate
Keweenaw-----	---	---	---	---	---	---	Low	Low	Moderate
322C: Stutts-----	---	---	---	---	---	---	Low	Low	Moderate
Keweenaw-----	---	---	---	---	---	---	Low	Low	Moderate
322D: Stutts-----	---	---	---	---	---	---	Low	Low	Moderate
Keweenaw-----	---	---	---	---	---	---	Low	Low	Moderate
323B: Keweenaw-----	---	---	---	---	---	---	Low	Low	Moderate
Kalkaska-----	---	---	---	---	---	---	Low	Low	High
323C: Keweenaw-----	---	---	---	---	---	---	Low	Low	Moderate
Kalkaska-----	---	---	---	---	---	---	Low	Low	High
323D: Keweenaw-----	---	---	---	---	---	---	Low	Low	Moderate
Kalkaska-----	---	---	---	---	---	---	Low	Low	High

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
325B: Siskiwit-----	---	---	---	---	---	---	Low	Moderate	Moderate
Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
325C: Siskiwit-----	---	---	---	---	---	---	Low	Moderate	Moderate
Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
327: Foxpaw-----	---	---	---	---	---	---	High	High	Moderate
Sarwet-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
328B: Annalake-----	---	---	---	---	---	---	Moderate	Moderate	Low
Karlin-----	---	---	---	---	---	---	Low	Low	High
328C: Annalake-----	---	---	---	---	---	---	Moderate	Moderate	Low
Karlin-----	---	---	---	---	---	---	Low	Low	High
328D: Karlin-----	---	---	---	---	---	---	Low	Low	High
Zandi-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
329A: Tula-----	Fragipan	15-30	10-56	Moderately cemented	---	---	High	High	Moderate
351B: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
351C: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	High	High

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
351D: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
351E: Schweitzer-----	Fragipan	15-30	6-45	Moderately cemented	---	---	Moderate	Moderate	High
351F: Schweitzer-----	Fragipan	15-30	6-45	Moderately cemented	---	---	Moderate	Moderate	High
353A: Tula-----	Fragipan	15-30	10-56	Moderately cemented	---	---	High	High	Moderate
354B: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
354C: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
354D: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
354E: Schweitzer-----	Fragipan	15-30	6-45	Moderately cemented	---	---	Moderate	Moderate	High
354F: Schweitzer-----	Fragipan	15-30	6-45	Moderately cemented	---	---	Moderate	Moderate	High
363C: Talus.									
Arcadian-----	Lithic bedrock	10-20	60-70	Indurated	---	---	Moderate	Low	Moderate
363D: Talus.									
Arcadian-----	Lithic bedrock	10-20	60-70	Indurated	---	---	Moderate	Low	Moderate

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
363E: Talus.									
Arcadian-----	Lithic bedrock	10-20	60-70	Indurated	---	---	Moderate	Low	Moderate
363F: Talus.									
Arcadian-----	Lithic bedrock	10-20	60-70	Indurated	---	---	Moderate	Low	Moderate
364F. Talus									
365F. Rock outcrop.									
369C: Dishno-----	Lithic bedrock	40-60	20-36	Indurated	---	---	Moderate	Moderate	High
Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Peshekee-----	Lithic bedrock	10-20	60-70	Indurated	---	---	Moderate	Moderate	High
Rock outcrop.									
369D: Dishno-----	Lithic bedrock	40-60	20-36	Indurated	---	---	Moderate	Moderate	High
Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Peshekee-----	Lithic bedrock	10-20	60-70	Indurated	---	---	Moderate	Moderate	High
Rock outcrop.									
369E: Michigamme-----	Lithic bedrock	20-40	40-60	Indurated	---	---	Moderate	Moderate	Moderate
Schweitzer-----	Fragipan	15-30	6-45	Moderately cemented	---	---	Moderate	Moderate	High
Peshekee-----	Lithic bedrock	10-20	60-70	Indurated	---	---	Moderate	Moderate	High
Rock outcrop.									

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
369F: Michigamme-----	Lithic bedrock	20-40	40-60	Indurated	---	---	Moderate	Moderate	Moderate
Schweitzer-----	Fragipan	15-30	6-45	Moderately cemented	---	---	Moderate	Moderate	High
Peshekee-----	Lithic bedrock	10-20	60-70	Indurated	---	---	Moderate	Moderate	High
Rock outcrop.									
370E: Peshekee-----	Lithic bedrock	10-20	60-70	Indurated	---	---	Moderate	Moderate	High
Rock outcrop.									
370F: Peshekee-----	Lithic bedrock	10-20	60-70	Indurated	---	---	Moderate	Moderate	High
Rock outcrop.									
375. Dumps and Pits, mine									
380: Beseman-----	---	---	---	---	8-25	16-50	High	Moderate	High
Greenwood-----	---	---	---	---	6-18	50-55	High	High	High
382: Cathro-----	---	---	---	---	8-25	16-50	High	High	Low
Arnheim-----	---	---	---	---	---	---	High	High	Moderate
388: Gay-----	---	---	---	---	---	---	High	High	Moderate
Tula-----	Fragipan	15-30	10-56	Moderately cemented	---	---	High	High	Moderate
398B: Tula-----	Fragipan	15-30	10-56	Moderately cemented	---	---	High	High	Moderate
Gay-----	---	---	---	---	---	---	High	High	Moderate

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
398B: Wakefield-----	Fragipan	16-24	6-48	Moderately cemented	---	---	Moderate	Moderate	Moderate
418: Loxley-----	---	---	---	---	6-18	50-55	High	High	High
Beseman-----	---	---	---	---	8-25	16-50	High	Moderate	High
419: Pleine-----	---	---	---	---	4-8	8-16	High	High	Moderate
Cathro-----	---	---	---	---	8-25	16-50	High	High	Low
Gay-----	---	---	---	---	---	---	High	High	Moderate
424: Gay-----	---	---	---	---	---	---	High	High	Moderate
425: Foxpaw-----	---	---	---	---	---	---	High	High	Moderate
Gay-----	---	---	---	---	---	---	High	High	Moderate
428C: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Michigamme-----	Lithic bedrock	20-40	40-60	Indurated	---	---	Moderate	Moderate	Moderate
428D: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Michigamme-----	Lithic bedrock	20-40	40-60	Indurated	---	---	Moderate	Moderate	Moderate
429B: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Peshekee-----	Lithic bedrock	10-20	60-70	Indurated	---	---	Moderate	Moderate	High
429C: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
429C: Peshekee-----	Lithic bedrock	10-20	60-70	Indurated	---	---	Moderate	Moderate	High
429D: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Peshekee-----	Lithic bedrock	10-20	60-70	Indurated	---	---	Moderate	Moderate	High
429E: Schweitzer-----	Fragipan	15-30	6-45	Moderately cemented	---	---	Moderate	Moderate	High
Peshekee-----	Lithic bedrock	10-20	60-70	Indurated	---	---	Moderate	Moderate	High
430B: Stutts-----	---	---	---	---	---	---	Low	Low	Moderate
430C: Stutts-----	---	---	---	---	---	---	Low	Low	Moderate
430D: Stutts-----	---	---	---	---	---	---	Low	Low	Moderate
430E: Stutts-----	---	---	---	---	---	---	Low	Low	Moderate
432C: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Michigamme-----	Lithic bedrock	20-40	40-60	Indurated	---	---	Moderate	Moderate	Moderate
Rock outcrop.									
432D: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Michigamme-----	Lithic bedrock	20-40	40-60	Indurated	---	---	Moderate	Moderate	Moderate
Rock outcrop.									

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
432E: Schweitzer-----	Fragipan	15-30	6-45	Moderately cemented	---	---	Moderate	Moderate	High
Michigamme-----	Lithic bedrock	20-40	40-60	Indurated	---	---	Moderate	Moderate	Moderate
Rock outcrop.									
432F: Schweitzer-----	Fragipan	15-30	6-45	Moderately cemented	---	---	Moderate	Moderate	High
Michigamme-----	Lithic bedrock	20-40	40-60	Indurated	---	---	Moderate	Moderate	Moderate
Rock outcrop.									
433B: McMillan-----	---	---	---	---	---	---	Low	Low	High
433C: McMillan-----	---	---	---	---	---	---	Low	Low	High
433D: McMillan-----	---	---	---	---	---	---	Low	Low	High
435C: Kalkaska-----	---	---	---	---	---	---	Low	Low	High
Waiska-----	---	---	---	---	---	---	Low	Low	High
435D: Kalkaska-----	---	---	---	---	---	---	Low	Low	High
Waiska-----	---	---	---	---	---	---	Low	Low	High
435E: Kalkaska-----	---	---	---	---	---	---	Low	Low	High
Waiska-----	---	---	---	---	---	---	Low	Low	High
437B: Manitowish-----	---	---	---	---	---	---	Low	Low	High
Channing-----	---	---	---	---	---	---	High	High	High

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
448F: Rockland-----	---	---	---	---	---	---	Moderate	Low	Moderate
Rock outcrop.									
449C: Flintsteel-----	Dense material	25-40	40-55	---	---	---	Moderate	Moderate	Moderate
Minocqua-----	---	---	---	---	---	---	High	High	Moderate
452F: Rockland-----	---	---	---	---	---	---	Moderate	Low	Moderate
460B: Belding-----	Dense material	30-60	20-50	---	---	---	High	High	Moderate
Manido-----	---	---	---	---	---	---	Low	Low	High
461B: Loggerhead-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
462C: Nonesuch-----	Fragipan	18-39	6-15	Moderately cemented	---	---	Moderate	Moderate	High
	Paralithic bedrock	20-40	0-60	Weakly cemented					
	Lithic bedrock	20-60	20-60	Indurated					
Rock outcrop.									
509: Cathro-----	---	---	---	---	8-25	16-50	High	High	Low
Minocqua-----	---	---	---	---	---	---	High	High	Moderate
511A: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Tula-----	Fragipan	15-30	10-56	Moderately cemented	---	---	High	High	Moderate
Chabeneau-----	---	---	---	---	---	---	Moderate	Low	Moderate

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
519B: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Karlin-----	---	---	---	---	---	---	Low	Low	High
519C: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Karlin-----	---	---	---	---	---	---	Low	Low	High
519D: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Karlin-----	---	---	---	---	---	---	Low	Low	High
522. Pits, sand and gravel									
523D: Gogebic, sandy substratum-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Karlin-----	---	---	---	---	---	---	Low	Low	High
524C: Waiska-----	---	---	---	---	---	---	Low	Low	High
Amasa-----	---	---	---	---	---	---	Moderate	Moderate	High
524D: Waiska-----	---	---	---	---	---	---	Low	Low	High
Amasa-----	---	---	---	---	---	---	Moderate	Moderate	High
524E: Waiska-----	---	---	---	---	---	---	Low	Low	High
Amasa-----	---	---	---	---	---	---	Moderate	Moderate	High
527B: Wakefield-----	Fragipan	16-24	6-48	Strongly cemented	---	---	Moderate	Moderate	Moderate

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
527C: Wakefield-----	Fragipan	16-24	6-48	Strongly cemented	---	---	Moderate	Low	Moderate
527D: Wakefield-----	Fragipan	16-24	6-48	Strongly cemented	---	---	Moderate	Low	Moderate
528B: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Annalake-----	---	---	---	---	---	---	High	Moderate	Moderate
528C: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Annalake-----	---	---	---	---	---	---	High	Moderate	Moderate
528D: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Annalake-----	---	---	---	---	---	---	High	Moderate	Moderate
551B: Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Dishno-----	Lithic bedrock	40-60	20-36	Indurated	---	---	Moderate	Moderate	High
566. Beach, rubbly									
576B: Flintsteel-----	Dense material	25-40	40-55	---	---	---	Moderate	Moderate	Moderate
Loggerhead-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
576C: Flintsteel-----	Dense material	25-40	40-55	---	---	---	Moderate	Moderate	Moderate
Loggerhead-----	---	---	---	---	---	---	Moderate	Moderate	Moderate

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
576D: Flintsteel-----	Dense material	25-40	40-55	---	---	---	Moderate	Moderate	Moderate
Loggerhead-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
577B: Loggerhead-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
Chabeneau-----	---	---	---	---	---	---	Moderate	Low	Moderate
Arcadian-----	Lithic bedrock	10-20	60-70	Indurated	---	---	Moderate	Low	Moderate
577C: Loggerhead-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
Chabeneau-----	---	---	---	---	---	---	Moderate	Low	Moderate
Arcadian-----	Lithic bedrock	10-20	60-70	Indurated	---	---	Moderate	Low	Moderate
577D: Loggerhead-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
Chabeneau-----	---	---	---	---	---	---	Moderate	Low	Moderate
Arcadian-----	Lithic bedrock	10-20	60-70	Indurated	---	---	Moderate	Low	Moderate
578D: Arcadian-----	Lithic bedrock	10-20	60-70	Indurated	---	---	Moderate	Low	Moderate
Keweenaw-----	---	---	---	---	---	---	Low	Low	Moderate
625B: Fence-----	---	---	---	---	---	---	High	Low	High
625C: Fence-----	---	---	---	---	---	---	High	Low	High
626D: Sporley-----	---	---	---	---	---	---	High	Moderate	Moderate
626E: Sporley-----	---	---	---	---	---	---	High	Moderate	Moderate
648B: Annalake-----	---	---	---	---	---	---	High	Moderate	Moderate

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
648C: Annalake-----	---	---	---	---	---	---	High	Moderate	Moderate
650: Leafriver-----	---	---	---	---	4-8	8-16	Moderate	High	Moderate
652B: Manido-----	---	---	---	---	---	---	Low	Low	High
Annalake-----	---	---	---	---	---	---	High	Moderate	Moderate
656B: Stutts-----	---	---	---	---	---	---	Low	Low	Moderate
Zandi-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
656C: Stutts-----	---	---	---	---	---	---	Low	Low	Moderate
Zandi-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
656D: Stutts-----	---	---	---	---	---	---	Low	Low	Moderate
Zandi-----	---	---	---	---	---	---	Moderate	Moderate	Moderate
680B: Tonkey-----	---	---	---	---	---	---	High	Moderate	Moderate
Pleine-----	---	---	---	---	4-8	8-16	High	High	Moderate
Annalake-----	---	---	---	---	---	---	High	Moderate	Moderate
681: Cathro-----	---	---	---	---	8-25	16-50	High	Moderate	Moderate
Tonkey-----	---	---	---	---	---	---	High	Moderate	Moderate
683B: Amasa-----	---	---	---	---	---	---	Moderate	Moderate	High
Oldman-----	Fragipan	16-30	20-72	Moderately cemented	---	---	Moderate	Moderate	Moderate

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
683C: Amasa-----	---	---	---	---	---	---	Moderate	Moderate	High
Oldman-----	Fragipan	16-30	20-72	Moderately cemented	---	---	Moderate	Moderate	Moderate
683D: Amasa-----	---	---	---	---	---	---	Moderate	Moderate	High
Oldman-----	Fragipan	16-30	20-72	Moderately cemented	---	---	Moderate	Moderate	Moderate
684B: Amasa-----	---	---	---	---	---	---	Moderate	Moderate	High
684C: Amasa-----	---	---	---	---	---	---	Moderate	Moderate	High
684D: Amasa-----	---	---	---	---	---	---	Moderate	Moderate	High
686B: Annalake-----	---	---	---	---	---	---	High	Moderate	Moderate
Robago-----	---	---	---	---	---	---	High	Moderate	Moderate
688: Cathro-----	---	---	---	---	8-25	16-50	High	Moderate	Moderate
Leafriver-----	---	---	---	---	4-8	8-16	Moderate	High	Moderate
689B: Chabeneau-----	---	---	---	---	---	---	Moderate	Low	Moderate
Channing-----	---	---	---	---	---	---	High	High	High
Gogebic-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
691B: Dishno-----	Lithic bedrock	40-60	20-36	Indurated	---	---	Moderate	Moderate	High
Tula-----	Fragipan	15-30	10-56	Moderately cemented	---	---	High	High	Moderate
Rock outcrop.									

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
691D: Dishno-----	Lithic bedrock	40-60	20-36	Indurated	---	---	Moderate	Moderate	High
Tula-----	Fragipan	15-30	10-56	Moderately cemented	---	---	High	High	Moderate
Rock outcrop.									
693B: Chabeneau-----	---	---	---	---	---	---	Moderate	Low	Moderate
Annalake-----	---	---	---	---	---	---	High	Moderate	Moderate
694D: Annalake-----	---	---	---	---	---	---	High	Moderate	Moderate
Stutts-----	---	---	---	---	---	---	Low	Low	Moderate
Arnheim-----	---	---	---	---	---	---	High	High	Moderate
5170: Minocqua-----	---	---	---	---	---	---	High	High	Moderate
Pleine-----	---	---	---	---	4-8	8-16	High	High	Moderate
Cathro-----	---	---	---	---	8-25	16-50	High	Moderate	Moderate
5171B: Tula-----	Fragipan	15-30	10-56	Moderately cemented	---	---	High	High	Moderate
Wormet-----	---	---	---	---	---	---	Moderate	Moderate	High
Gogebic, sandy substratum-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
5172B: Gogebic, sandy substratum-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Pence-----	---	---	---	---	---	---	Low	Low	Moderate
Cathro-----	---	---	---	---	8-25	16-50	High	Moderate	Moderate

Table 19.--Soil Features--Continued

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
5172C: Gogebic, sandy substratum-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Pence-----	---	---	---	---	---	---	Low	Low	Moderate
Cathro-----	---	---	---	---	8-25	16-50	High	Moderate	Moderate
5172D: Gogebic, sandy substratum-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Pence-----	---	---	---	---	---	---	Low	Low	Moderate
Cathro-----	---	---	---	---	8-25	16-50	High	Moderate	Moderate
5173D: Gogebic, sandy substratum-----	Fragipan	18-36	6-42	Moderately cemented	---	---	Moderate	Moderate	High
Pence-----	---	---	---	---	---	---	Low	Low	Moderate

Table 20.--Soil Moisture Status by Depth

(Depths of layers are in feet)

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
7:												
Histosols-----	0.0-7.0: Wet	0.0-7.0: Wet	0.0-7.0: Wet	0.0-7.0: Wet	0.0-7.0: Wet	0.0-7.0: Wet	0.0-7.0: Wet	0.0-7.0: Wet	0.0-7.0: Wet	0.0-7.0: Wet	0.0-7.0: Wet	0.0-7.0: Wet
Aquents-----	0.0-7.0: Wet	0.0-7.0: Wet	0.0-7.0: Wet	0.0-7.0: Wet	0.0-7.0: Wet	0.0-7.0: Wet	0.0-7.0: Wet	0.0-7.0: Wet	0.0-7.0: Wet	0.0-7.0: Wet	0.0-7.0: Wet	0.0-7.0: Wet
10:												
Witbeck-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
12A:												
Monico-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.0: Moist 5.0-6.7: Wet	0.0-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet ---	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-1.0: Moist 1.0-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-1.0: Moist 1.0-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-1.5: Moist 1.5-2.0: Wet 2.0-5.5: Moist 5.5-6.7: Wet
13B:												
Argonne-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---
13C:												
Argonne-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
13D:												
Argonne-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---
15B:												
Wabeno-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Moist 2.0-3.0: Wet 3.0-6.7: Moist	0.0-1.5: Moist 1.5-3.0: Wet 3.0-6.7: Moist	0.0-2.0: Moist 2.0-3.0: Wet 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.5: Moist 2.5-3.0: Wet 3.0-6.7: Moist	0.0-2.0: Moist 2.0-3.0: Wet 3.0-6.7: Moist	0.0-6.7: Moist ---
15C:												
Wabeno-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Moist 2.0-3.0: Wet 3.0-6.7: Moist	0.0-1.5: Moist 1.5-3.0: Wet 3.0-6.7: Moist	0.0-2.0: Moist 2.0-3.0: Wet 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.5: Moist 2.5-3.0: Wet 3.0-6.7: Moist	0.0-2.0: Moist 2.0-3.0: Wet 3.0-6.7: Moist	0.0-6.7: Moist ---
16A:												
Fence-----	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
17B:												
Lode-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
17C:												
Lode-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
20B:												
Pence-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Lode-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
20C:												
Pence-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
21:												
Minocqua-----	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet
Leafriver-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
23B:												
Chabeneau-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Pence-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
26B: Stambaugh-----	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
27: Lupton-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Tawas-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
28: Dawson-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Greenwood-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Loxley-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
29B: Pence-----	0.0-10.5: Moist 10.5-15.0: Wet ---	0.0-10.5: Moist 10.5-15.0: Wet ---	0.0-9.7: Moist 9.7-15.0: Wet ---	0.0-9.2: Moist 9.2-15.0: Wet ---	0.0-9.2: Moist 9.2-15.0: Wet ---	0.0-10.5: Moist 10.5-15.0: Wet ---	0.0-2.0: Dry 2.0-12.4: Moist 12.4-15.0: Wet	0.0-3.0: Dry 3.0-12.5: Moist 12.5-15.0: Wet	0.0-9.4: Moist 9.4-15.0: Wet ---	0.0-7.9: Moist 7.9-15.0: Wet ---	0.0-7.9: Moist 7.9-15.0: Wet ---	0.0-8.9: Moist 8.9-15.0: Wet ---
31: Ewart-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
31: Tawas-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
32A: Net-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-1.0: Moist 1.0-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-0.5: Dry 0.5-6.7: Wet ---	0.0-6.7: Moist ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---
35A: Beechwood-----	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-0.5: Dry 0.5-3.0: Moist 3.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---
36: Gay-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Pleine-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---
37B: Gogebic-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
37B:												
Tula-----	0.0-5.5: Moist	0.0-5.5: Moist	0.0-1.5: Moist	0.0-0.5: Moist	0.0-0.5: Moist	0.0-1.0: Moist	0.0-5.5: Moist	0.0-0.5: Dry	0.0-6.7: Moist	0.0-2.0: Moist	0.0-1.5: Moist	0.0-5.5: Moist
	5.5-6.7: Wet	5.5-6.7: Wet	1.5-2.5: Wet	0.5-2.5: Wet	0.5-2.5: Wet	1.0-2.5: Wet	5.5-6.7: Wet	0.5-6.7: Moist	---	2.0-2.5: Wet	1.5-2.5: Wet	5.5-6.7: Wet
	---	---	2.5-5.0: Moist	2.5-4.5: Moist	2.5-4.5: Moist	2.5-4.5: Moist	---	---	---	2.5-5.5: Moist	2.5-5.5: Moist	---
	---	---	5.0-6.7: Wet	4.5-6.7: Wet	4.5-6.7: Wet	4.5-6.7: Wet	---	---	---	5.5-6.7: Wet	5.5-6.7: Wet	---
Lupton-----	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-0.5: Moist	0.0-1.0: Moist	0.0-0.5: Moist	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet
	---	---	---	---	---	---	0.5-6.7: Wet	1.0-6.7: Wet	0.5-6.7: Wet	---	---	---
38B:												
Gogebic-----	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.5: Moist	0.0-1.0: Moist	0.0-1.5: Moist	0.0-6.7: Moist	0.0-1.0: Dry	0.0-1.5: Dry	0.0-6.7: Moist	0.0-1.5: Moist	0.0-1.5: Moist	0.0-6.7: Moist
	---	---	1.5-2.0: Wet	1.0-2.0: Wet	1.5-2.0: Wet	---	1.0-6.7: Moist	1.5-6.7: Moist	---	1.5-2.0: Wet	1.5-2.0: Wet	---
	---	---	2.0-6.7: Moist	2.0-6.7: Moist	2.0-6.7: Moist	---	---	---	---	2.0-6.7: Moist	2.0-6.7: Moist	---
38C:												
Gogebic-----	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.5: Moist	0.0-1.0: Moist	0.0-1.5: Moist	0.0-6.7: Moist	0.0-1.0: Dry	0.0-1.5: Dry	0.0-6.7: Moist	0.0-1.5: Moist	0.0-1.5: Moist	0.0-6.7: Moist
	---	---	1.5-2.0: Wet	1.0-2.0: Wet	1.5-2.0: Wet	---	1.0-6.7: Moist	1.5-6.7: Moist	---	1.5-2.0: Wet	1.5-2.0: Wet	---
	---	---	2.0-6.7: Moist	2.0-6.7: Moist	2.0-6.7: Moist	---	---	---	---	2.0-6.7: Moist	2.0-6.7: Moist	---
38D:												
Gogebic-----	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.5: Moist	0.0-1.0: Moist	0.0-1.5: Moist	0.0-6.7: Moist	0.0-1.0: Dry	0.0-1.5: Dry	0.0-6.7: Moist	0.0-1.5: Moist	0.0-1.5: Moist	0.0-6.7: Moist
	---	---	1.5-2.0: Wet	1.0-2.0: Wet	1.5-2.0: Wet	---	1.0-6.7: Moist	1.5-6.7: Moist	---	1.5-2.0: Wet	1.5-2.0: Wet	---
	---	---	2.0-6.7: Moist	2.0-6.7: Moist	2.0-6.7: Moist	---	---	---	---	2.0-6.7: Moist	2.0-6.7: Moist	---
39B:												
Gogebic-----	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.5: Moist	0.0-1.0: Moist	0.0-1.5: Moist	0.0-6.7: Moist	0.0-1.0: Dry	0.0-1.5: Dry	0.0-6.7: Moist	0.0-1.5: Moist	0.0-1.5: Moist	0.0-6.7: Moist
	---	---	1.5-2.0: Wet	1.0-2.0: Wet	1.5-2.0: Wet	---	1.0-6.7: Moist	1.5-6.7: Moist	---	1.5-2.0: Wet	1.5-2.0: Wet	---
	---	---	2.0-6.7: Moist	2.0-6.7: Moist	2.0-6.7: Moist	---	---	---	---	2.0-6.7: Moist	2.0-6.7: Moist	---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
39C: Gogebic-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---
39D: Gogebic-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---
41: Lupton-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Pleine-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Cathro-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
42: Ausable-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Tawas-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
43B:												
Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Pence-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
43C:												
Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Pence-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
43D:												
Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Pence-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
44B:												
Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Keweenaw-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
44B: Sarona-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
44C: Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Keweenaw-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Sarona-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
44D: Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Keweenaw-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Sarona-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
46C: Amasa-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
46D:												
Amasa-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
46E:												
Amasa-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
46F:												
Amasa-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
47B:												
Karlin-----	0.0-10.5: Moist 10.5-15.0: Wet ---	0.0-10.5: Moist 10.5-15.0: Wet ---	0.0-9.7: Moist 9.7-15.0: Wet ---	0.0-9.2: Moist 9.2-15.0: Wet ---	0.0-9.2: Moist 9.2-15.0: Wet ---	0.0-10.5: Moist 10.5-15.0: Wet ---	0.0-2.0: Dry 2.0-12.4: Moist 12.4-15.0: Wet	0.0-3.0: Dry 3.0-12.5: Moist 12.5-15.0: Wet	0.0-9.4: Moist 9.4-15.0: Wet ---	0.0-7.9: Moist 7.9-15.0: Wet ---	0.0-7.9: Moist 7.9-15.0: Wet ---	0.0-8.9: Moist 8.9-15.0: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
47B:												
Noseum-----	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-1.5: Dry 1.5-4.5: Moist 4.5-6.7: Wet	0.0-2.5: Dry 2.5-5.5: Moist 5.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.0: Moist 4.0-6.7: Wet ---
Gay-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
48C:												
Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Michigamme-----	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-1.0: Dry 1.0-2.6: Moist	0.0-1.5: Dry 1.5-2.6: Moist	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---
48F:												
Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Michigamme-----	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-1.0: Dry 1.0-2.6: Moist	0.0-1.5: Dry 1.5-2.6: Moist	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---
49B:												
Pelissier-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Sarwet-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
49C:												
Pelissier-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Sarwet-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
49D:												
Pelissier-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
52B:												
Pence-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Vilas-----	0.0-10.5: Moist 10.5-15.0: Wet ---	0.0-10.5: Moist 10.5-15.0: Wet ---	0.0-9.7: Moist 9.7-15.0: Wet ---	0.0-9.2: Moist 9.2-15.0: Wet ---	0.0-9.2: Moist 9.2-15.0: Wet ---	0.0-10.5: Moist 10.5-15.0: Wet ---	0.0-2.0: Dry 2.0-12.4: Moist 12.4-15.0: Wet	0.0-3.0: Dry 3.0-12.5: Moist 12.5-15.0: Wet	0.0-9.4: Moist 9.4-15.0: Wet ---	0.0-7.9: Moist 7.9-15.0: Wet ---	0.0-7.9: Moist 7.9-15.0: Wet ---	0.0-8.9: Moist 8.9-15.0: Wet ---
52C:												
Pence-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Vilas-----	0.0-10.5: Moist 10.5-15.0: Wet ---	0.0-10.5: Moist 10.5-15.0: Wet ---	0.0-9.7: Moist 9.7-15.0: Wet ---	0.0-9.2: Moist 9.2-15.0: Wet ---	0.0-9.2: Moist 9.2-15.0: Wet ---	0.0-10.5: Moist 10.5-15.0: Wet ---	0.0-2.0: Dry 2.0-12.4: Moist 12.4-15.0: Wet	0.0-3.0: Dry 3.0-12.5: Moist 12.5-15.0: Wet	0.0-9.4: Moist 9.4-15.0: Wet ---	0.0-7.9: Moist 7.9-15.0: Wet ---	0.0-7.9: Moist 7.9-15.0: Wet ---	0.0-8.9: Moist 8.9-15.0: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
53B:												
Manitowish-----	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-3.5: Moist 3.5-6.7: Wet ---	0.0-1.5: Dry 1.5-4.5: Moist 4.5-6.7: Wet	0.0-2.5: Dry 2.5-5.5: Moist 5.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-4.0: Moist 4.0-6.7: Wet ---
Croswell-----	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-3.5: Moist 3.5-6.7: Wet ---	0.0-1.5: Dry 1.5-4.5: Moist 4.5-6.7: Wet	0.0-2.5: Dry 2.5-5.5: Moist 5.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-4.0: Moist 4.0-6.7: Wet ---
57B:												
Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Manitowish-----	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-3.5: Moist 3.5-6.7: Wet ---	0.0-1.5: Dry 1.5-4.5: Moist 4.5-6.7: Wet	0.0-2.5: Dry 2.5-5.5: Moist 5.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-4.0: Moist 4.0-6.7: Wet ---
57C:												
Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Manitowish-----	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-3.5: Moist 3.5-6.7: Wet ---	0.0-1.5: Dry 1.5-4.5: Moist 4.5-6.7: Wet	0.0-2.5: Dry 2.5-5.5: Moist 5.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-4.0: Moist 4.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
58B:												
Vilas-----	0.0-10.5: Moist 10.5-15.0: Wet ---	0.0-10.5: Moist 10.5-15.0: Wet ---	0.0-9.7: Moist 9.7-15.0: Wet ---	0.0-9.2: Moist 9.2-15.0: Wet ---	0.0-9.2: Moist 9.2-15.0: Wet ---	0.0-10.5: Moist 10.5-15.0: Wet ---	0.0-2.0: Dry 2.0-12.4: Moist 12.4-15.0: Wet	0.0-3.0: Dry 3.0-12.5: Moist 12.5-15.0: Wet	0.0-9.4: Moist 9.4-15.0: Wet ---	0.0-7.9: Moist 7.9-15.0: Wet ---	0.0-7.9: Moist 7.9-15.0: Wet ---	0.0-8.9: Moist 8.9-15.0: Wet ---
Croswell-----	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-3.5: Moist 3.5-6.7: Wet ---	0.0-1.5: Dry 1.5-4.5: Moist 4.5-6.7: Wet	0.0-2.5: Dry 2.5-5.5: Moist 5.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-4.0: Moist 4.0-6.7: Wet ---
Pence-----	0.0-10.5: Moist 10.5-15.0: Wet ---	0.0-10.5: Moist 10.5-15.0: Wet ---	0.0-9.7: Moist 9.7-15.0: Wet ---	0.0-9.2: Moist 9.2-15.0: Wet ---	0.0-9.2: Moist 9.2-15.0: Wet ---	0.0-10.5: Moist 10.5-15.0: Wet ---	0.0-2.0: Dry 2.0-12.4: Moist 12.4-15.0: Wet	0.0-3.0: Dry 3.0-12.5: Moist 12.5-15.0: Wet	0.0-9.4: Moist 9.4-15.0: Wet ---	0.0-7.9: Moist 7.9-15.0: Wet ---	0.0-7.9: Moist 7.9-15.0: Wet ---	0.0-8.9: Moist 8.9-15.0: Wet ---
61:												
Tawas-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Kinross-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
62B:												
Pelkie-----	0.0-5.0: Moist 5.0-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet
83:												
Bowstring-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
141D: Oldman-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-1.0: Moist 1.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist --- ---
141E: Oldman-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-1.0: Moist 1.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist --- ---
141F: Porkies-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
214B: Amnicon-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Moist 1.0-1.5: Wet 1.5-6.7: Moist	0.0-1.0: Moist 1.0-1.5: Wet 1.5-6.7: Moist	0.0-1.0: Moist 1.0-1.5: Wet 1.5-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.0: Moist 1.0-1.5: Wet 1.5-6.7: Moist	0.0-1.0: Moist 1.0-1.5: Wet 1.5-6.7: Moist	0.0-1.0: Moist 1.0-1.5: Wet 1.5-6.7: Moist	0.0-1.0: Moist 1.0-1.5: Wet 1.5-6.7: Moist
Bergland-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Wet 1.5-6.7: Moist ---	0.0-1.5: Wet 1.5-6.7: Moist ---	0.0-1.5: Wet 1.5-6.7: Moist ---	0.0-0.5: Moist Wet 1.5-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-0.5: Moist Wet 1.5-6.7: Moist	0.0-1.5: Wet 1.5-6.7: Moist ---	0.0-1.5: Wet 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---
216B: Amnicon-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Moist 1.0-1.5: Wet 1.5-6.7: Moist	0.0-1.0: Moist 1.0-1.5: Wet 1.5-6.7: Moist	0.0-1.0: Moist 1.0-1.5: Wet 1.5-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.0: Moist 1.0-1.5: Wet 1.5-6.7: Moist	0.0-1.0: Moist 1.0-1.5: Wet 1.5-6.7: Moist	0.0-1.0: Moist 1.0-1.5: Wet 1.5-6.7: Moist	0.0-1.0: Moist 1.0-1.5: Wet 1.5-6.7: Moist

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
217A: Cuttre-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-0.5: Moist 0.5-2.5: Wet 2.5-6.7: Moist	0.0-0.5: Moist 0.5-2.5: Wet 2.5-6.7: Moist	0.0-1.0: Moist 1.0-2.5: Wet 2.5-6.7: Moist	0.0-0.5: Dry 0.5-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist --- ---
218: Bergland-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Wet 1.5-6.7: Moist ---	0.0-1.5: Wet 1.5-6.7: Moist ---	0.0-1.5: Wet 1.5-6.7: Moist ---	0.0-0.5: Moist 0.5-1.5: Wet 1.5-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-0.5: Moist 0.5-1.5: Wet 1.5-6.7: Moist	0.0-1.5: Wet 1.5-6.7: Moist ---	0.0-1.5: Wet 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---
219B: Payseor-----	0.0-5.5: Moist 5.5-6.7: Wet --- ---	0.0-5.5: Moist 5.5-6.7: Wet --- ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.0: Moist 5.0-6.7: Wet	0.0-2.5: Wet 2.5-4.5: Moist Wet ---	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-1.0: Moist 1.0-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet --- ---	0.0-0.5: Dry 0.5-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet --- ---
Froberg-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-2.5: Moist 2.5-2.6: Wet 2.6-6.7: Moist	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist --- ---
222: Matchwood-----	0.0-6.7: Wet --- ---	0.0-6.7: Wet --- ---	0.0-6.7: Wet --- ---	0.0-6.7: Wet --- ---	0.0-6.7: Wet --- ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet --- ---	0.0-6.7: Wet --- ---	0.0-6.7: Wet --- ---
225A: Cuttre-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-0.5: Moist 0.5-2.5: Wet 2.5-6.7: Moist	0.0-0.5: Moist 0.5-2.5: Wet 2.5-6.7: Moist	0.0-1.0: Moist 1.0-2.5: Wet 2.5-6.7: Moist	0.0-0.5: Dry 0.5-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist --- ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
225A: Bergland-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Wet 1.5-6.7: Moist ---	0.0-1.5: Wet 1.5-6.7: Moist ---	0.0-1.5: Wet 1.5-6.7: Moist ---	0.0-0.5: Moist 0.5-1.5: Wet 1.5-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-0.5: Moist 0.5-1.5: Wet 1.5-6.7: Moist	0.0-1.5: Wet 1.5-6.7: Moist ---	0.0-1.5: Wet 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---
226B: Froberg-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-2.5: Moist 2.5-2.6: Wet 2.6-6.7: Moist	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist --- ---
230B: Moquah-----	0.0-5.0: Moist 5.0-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet
Arnheim-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
231: Matchwood-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Dorval-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
233: Schaat Creek----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
239D: Miskoaki-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
277B: Kellogg-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet Moist	0.0-1.5: Moist 1.5-2.5: Wet Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet Moist	0.0-6.7: Moist ---
Allendale-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-0.5: Moist 0.5-2.5: Wet Moist	0.0-0.5: Moist 0.5-2.5: Wet Moist	0.0-1.0: Moist 1.0-2.5: Wet Moist	0.0-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet Moist	0.0-6.7: Moist ---
280B: Flintsteel-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-6.7: Moist ---
280C: Flintsteel-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-6.7: Moist ---
282B: Big Iron-----	0.0-0.5: Moist 0.5-2.0: Wet 6.0-6.7: Moist ---	0.0-0.5: Moist 0.5-2.0: Wet 6.0-6.7: Moist ---	0.0-0.5: Moist 0.5-2.0: Wet Moist 6.0-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet Moist 5.0-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet Moist 5.0-6.7: Wet	0.0-1.0: Moist 1.0-2.5: Wet Moist 5.0-6.7: Wet	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-0.5: Dry 0.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-0.5: Moist 0.5-2.0: Wet 2.0-6.0: Moist 6.0-6.7: Wet	0.0-0.5: Moist 0.5-2.0: Wet 2.0-6.0: Moist 6.0-6.7: Wet	0.0-0.5: Moist 0.5-2.0: Wet 6.0-6.7: ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
282B:												
Flintsteel-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-6.7: Moist ---
283B:												
Loggerhead-----	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist
Noseum-----	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-1.5: Dry 1.5-4.5: Moist 4.5-6.7: Wet	0.0-2.5: Dry 2.5-5.5: Moist 5.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.0: Moist 4.0-6.7: Wet ---
Ubyl-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
283C:												
Loggerhead-----	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist
Noseum-----	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-1.5: Dry 1.5-4.5: Moist 4.5-6.7: Wet	0.0-2.5: Dry 2.5-5.5: Moist 5.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.0: Moist 4.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
283C:												
Ubyly-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
284:												
Aquents-----	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet
Gull Point-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---
285F:												
Rockland-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Arnheim-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
286A:												
Big Iron-----	0.0-0.5: Moist 0.5-2.0: Wet 6.0-6.7: Moist ---	0.0-0.5: Moist 0.5-2.0: Wet 6.0-6.7: Moist ---	0.0-0.5: Moist 0.5-2.0: Wet 2.0-6.0: Moist 6.0-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-5.0: Moist 5.0-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-5.0: Moist 5.0-6.7: Wet	0.0-1.0: Moist 1.0-2.5: Wet 2.5-5.0: Moist 5.0-6.7: Wet	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-0.5: Dry 0.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-0.5: Moist 0.5-2.0: Wet 2.0-6.0: Moist 6.0-6.7: Wet	0.0-0.5: Moist 0.5-2.0: Wet 2.0-6.0: Moist 6.0-6.7: Wet	0.0-0.5: Moist 0.5-2.0: Wet 2.0-6.0: Moist 6.0-6.7: Wet
Belding-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-0.5: Moist 0.5-2.5: Wet 2.5-6.7: Moist	0.0-0.5: Moist 0.5-2.5: Wet 2.5-6.7: Moist	0.0-1.0: Moist 1.0-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
287:												
Trap Falls-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Tonkey-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
289B:												
Amasa-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
290B:												
Flintsteel-----	0.0-6.7: Moist 0.0-6.7: Moist ---	0.0-6.7: Moist Moist ---	0.0-1.0: Moist Moist 1.0-6.7: Wet 1.0-6.7: Wet ---	0.0-1.0: Moist Moist 1.0-6.7: Wet 1.0-6.7: Wet ---	0.0-1.0: Moist Moist 1.0-6.7: Wet 1.0-6.7: Wet ---	0.0-4.5: Moist Moist 4.5-6.7: Wet 4.5-6.7: Wet ---	0.0-1.0: Dry 0.0-1.0: Dry 1.0-6.0: Moist 1.0-6.0: Moist 6.0-6.7: Wet 6.0-6.7: Wet	0.0-1.5: Dry 0.0-1.5: Dry 1.5-6.7: Moist 1.5-6.7: Moist ---	0.0-6.7: Moist Moist Moist ---	0.0-5.0: Moist Moist Moist 5.0-6.7: Wet 5.0-6.7: Wet ---	0.0-1.0: Moist Moist Moist 1.0-6.7: Wet 1.0-6.7: Wet ---	0.0-6.7: Moist Moist Moist ---
290C:												
Flintsteel-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-4.5: Moist Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-6.7: Moist ---
291B:												
Kalkaska-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
291D: Kalkaska-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
292B: Manido-----	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-3.5: Moist 3.5-6.7: Wet ---	0.0-1.5: Dry 1.5-4.5: Moist 4.5-6.7: Wet	0.0-2.0: Dry 2.0-5.0: Moist 5.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-4.0: Moist 4.0-6.7: Wet ---
Richter-----	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-0.5: Dry 0.5-3.0: Moist 3.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---
293A: Wainola-----	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-0.5: Dry 0.5-3.0: Moist 3.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---
Trap Falls-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
296B: Manido-----	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-3.5: Moist 3.5-6.7: Wet ---	0.0-1.5: Dry 1.5-4.5: Moist 4.5-6.7: Wet	0.0-2.0: Dry 2.0-5.0: Moist 5.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-4.0: Moist 4.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
296B:												
Fence-----	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
Gogebic-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---
296D:												
Manido-----	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-3.5: Moist 3.5-6.7: Wet ---	0.0-1.5: Dry 1.5-4.5: Moist 4.5-6.7: Wet	0.0-2.0: Dry 2.0-5.0: Moist 5.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-4.0: Moist 4.0-6.7: Wet ---
Sporley-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Gogebic-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---
299B:												
Zandi-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Amasa-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
299B:												
Flintsteel-----	0.0-5.8: Moist	0.0-5.0: Moist	0.0-3.0: Moist	0.0-1.5: Moist	0.0-2.0: Moist	0.0-4.5: Moist	0.0-1.0: Dry	0.0-1.5: Dry	0.0-6.7: Moist	0.0-5.0: Moist	0.0-4.5: Moist	0.0-5.0: Moist
	5.8-6.7: Wet	5.0-6.7: Wet	3.0-6.7: Wet	1.5-6.7: Wet	2.0-6.7: Wet	4.5-6.7: Wet	1.0-6.0: Moist	1.5-6.7: Moist	--- ---	5.0-6.7: Wet	4.5-6.7: Wet	5.0-6.7: Wet
	---	---	---	---	---	---	6.0-6.7: Wet	---	---	---	---	---
299C:												
Zandi-----	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Dry	0.0-1.5: Dry	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
	---	---	---	---	---	---	1.0-6.7: Moist	1.5-6.7: Moist	---	---	---	---
Amasa-----	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-0.5: Dry	0.0-1.0: Dry	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
	---	---	---	---	---	---	0.5-6.7: Moist	1.0-6.7: Moist	---	---	---	---
Flintsteel-----	0.0-5.8: Moist	0.0-5.0: Moist	0.0-3.0: Moist	0.0-1.5: Moist	0.0-2.0: Moist	0.0-4.5: Moist	0.0-1.0: Dry	0.0-1.5: Dry	0.0-6.7: Moist	0.0-5.0: Moist	0.0-4.5: Moist	0.0-5.0: Moist
	5.8-6.7: Wet	5.0-6.7: Wet	3.0-6.7: Wet	1.5-6.7: Wet	2.0-6.7: Wet	4.5-6.7: Wet	1.0-6.0: Moist	1.5-6.7: Moist	---	5.0-6.7: Wet	4.5-6.7: Wet	5.0-6.7: Wet
	---	---	---	---	---	---	6.0-6.7: Wet	---	---	---	---	---
301A:												
Moodig-----	0.0-4.0: Moist	0.0-4.0: Moist	0.0-2.0: Moist	0.0-0.5: Moist	0.0-1.0: Moist	0.0-3.0: Moist	0.0-4.5: Moist	0.0-4.5: Moist	0.0-4.0: Moist	0.0-2.0: Moist	0.0-1.5: Moist	0.0-2.0: Moist
	4.0-5.0: Wet	4.0-5.0: Wet	2.0-5.0: Wet	0.5-5.0: Wet	1.0-5.0: Wet	3.0-5.0: Wet	4.5-5.0: Wet	4.5-5.0: Wet	4.0-5.0: Wet	2.0-5.0: Wet	1.5-5.0: Wet	2.0-5.0: Wet
	5.0-6.7: Moist	5.0-6.7: Moist	5.0-6.7: Moist	5.0-6.7: Moist	5.0-6.7: Moist	5.0-6.7: Moist	5.0-6.7: Moist	5.0-6.7: Moist	5.0-6.7: Moist	5.0-6.7: Moist	5.0-6.7: Moist	5.0-6.7: Moist
302B:												
Manitowish-----	0.0-5.0: Moist	0.0-5.0: Moist	0.0-2.5: Moist	0.0-2.0: Moist	0.0-2.0: Moist	0.0-3.5: Moist	0.0-1.5: Dry	0.0-2.5: Dry	0.0-4.5: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-4.0: Moist
	5.0-6.7: Wet	5.0-6.7: Wet	2.5-6.7: Wet	2.0-6.7: Wet	2.0-6.7: Wet	3.5-6.7: Wet	1.5-4.5: Moist	2.5-5.5: Moist	4.5-6.7: Wet	3.0-6.7: Wet	3.0-6.7: Wet	4.0-6.7: Wet
	---	---	---	---	---	---	4.5-6.7: Wet	5.5-6.7: Wet	---	---	---	---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
302C:												
Manitowish-----	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-3.5: Moist 3.5-6.7: Wet ---	0.0-1.5: Dry 1.5-4.5: Moist 4.5-6.7: Wet	0.0-2.5: Dry 2.5-5.5: Moist 5.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-4.0: Moist 4.0-6.7: Wet ---
303:												
Bowstring-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Arnheim-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
305B:												
Keweenaw-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Siskiwit-----	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-3.5: Moist 3.5-6.7: Wet ---	0.0-1.5: Dry 1.5-4.5: Moist 4.5-6.7: Wet	0.0-2.5: Dry 2.5-5.5: Moist 5.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-4.0: Moist 4.0-6.7: Wet ---
305C:												
Keweenaw-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Siskiwit-----	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-3.5: Moist 3.5-6.7: Wet ---	0.0-1.5: Dry 1.5-4.5: Moist 4.5-6.7: Wet	0.0-2.5: Dry 2.5-5.5: Moist 5.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-4.0: Moist 4.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
307: Lupton-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Cathro-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
309: Cathro-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
310B: Gogebic-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---
310C: Gogebic-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---
310D: Gogebic-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---
310E: Schweitzer-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
311B:												
Tula-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.0: Moist 5.0-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-1.0: Moist 1.0-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-0.5: Dry 0.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---
Gogebic-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---
312A:												
Tula-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.0: Moist 5.0-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-1.0: Moist 1.0-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-0.5: Dry 0.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---
Foxpaw-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Gay-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
316:												
Gay-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
317B: Gogebic-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---
317C: Gogebic-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---
317D: Gogebic-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---
319B: McMillan-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Noseum-----	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-1.5: Dry 1.5-4.5: Moist 4.5-6.7: Wet	0.0-2.5: Dry 2.5-5.5: Moist 5.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.0: Moist 4.0-6.7: Wet ---
319C: McMillan-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Islandlake-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
319D:												
McMillan-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Islandlake-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
319E:												
McMillan-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Islandlake-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
322B:												
Stutts-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Keweenaw-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
322C:												
Stutts-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Keweenaw-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
322D:												
Stutts-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Keweenaw-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
323B:												
Keweenaw-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Kalkaska-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
323C:												
Keweenaw-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Kalkaska-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
323D:												
Keweenaw-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Kalkaska-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
325B:												
Siskiwit-----	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-3.5: Moist 3.5-6.7: Wet ---	0.0-1.5: Dry 1.5-4.5: Moist 4.5-6.7: Wet	0.0-2.5: Dry 2.5-5.5: Moist 5.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-4.0: Moist 4.0-6.7: Wet ---
Gogebic-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---
325C:												
Siskiwit-----	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-3.5: Moist 3.5-6.7: Wet ---	0.0-1.5: Dry 1.5-4.5: Moist 4.5-6.7: Wet	0.0-2.5: Dry 2.5-5.5: Moist 5.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-4.0: Moist 4.0-6.7: Wet ---
Gogebic-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---
327:												
Foxpaw-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Sarwet-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
328B:												
Annalake-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
328C:												
Annalake-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
328D:												
Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Zandi-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
329A:												
Tula-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.0: Moist 5.0-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-1.0: Moist 1.0-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-0.5: Dry 0.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
351B: Gogebic-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---
351C: Gogebic-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---
351D: Gogebic-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---
351E: Schweitzer-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
351F: Schweitzer-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
353A: Tula-----	0.0-5.5: Moist 5.5-6.7: Wet --- ---	0.0-5.5: Moist 5.5-6.7: Wet --- ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.0: Moist 5.0-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-1.0: Moist 1.0-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet --- ---	0.0-0.5: Dry 0.5-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet --- ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
354B: Gogebic-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---
354C: Gogebic-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---
354D: Gogebic-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---
354E: Schweitzer-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---
354F: Schweitzer-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---
363C: Talus.												
Arcadian-----	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Dry	0.0-1.0: Dry	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
363D: Talus.												
Arcadian-----	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Dry	0.0-1.0: Dry	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist
363E: Talus.												
Arcadian-----	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Dry	0.0-1.0: Dry	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist
363F: Talus.												
Arcadian-----	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Dry	0.0-1.0: Dry	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist
364F. Talus												
365F. Rock outcrop												
369C: Dishno-----	0.0-3.8: Moist ---	0.0-3.8: Moist ---	0.0-2.0: Moist 2.0-3.8: Wet	0.0-2.0: Moist 2.0-3.8: Wet	0.0-2.0: Moist 2.0-3.8: Wet	0.0-3.8: Moist ---	0.0-1.0: Dry 1.0-3.8: Moist	0.0-1.5: Dry 1.5-3.8: Moist	0.0-3.0: Moist 3.0-3.8: Wet	0.0-2.0: Moist 2.0-3.8: Wet	0.0-2.0: Moist 2.0-3.8: Wet	0.0-3.8: Moist ---
Gogebic-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet	0.0-1.0: Moist 1.0-2.0: Wet	0.0-1.5: Moist 1.5-2.0: Wet	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet	0.0-1.5: Moist 1.5-2.0: Wet	0.0-6.7: Moist ---
Peshekee-----	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.0: Dry 1.0-1.6: Moist	0.0-1.6: Dry ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---
Rock outcrop.												

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
369D:												
Dishno-----	0.0-3.8: Moist ---	0.0-3.8: Moist ---	0.0-2.0: Moist 2.0-3.8: Wet	0.0-2.0: Moist 2.0-3.8: Wet	0.0-2.0: Moist 2.0-3.8: Wet	0.0-3.8: Moist ---	0.0-1.0: Dry 1.0-3.8: Moist	0.0-1.5: Dry 1.5-3.8: Moist	0.0-3.0: Moist 3.0-3.8: Wet	0.0-2.0: Moist 2.0-3.8: Wet	0.0-2.0: Moist 2.0-3.8: Wet	0.0-3.8: Moist ---
Gogebic-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---
Peshekee-----	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.0: Dry 1.0-1.6: Moist	0.0-1.6: Dry ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---
Rock outcrop.												
369E:												
Michigamme-----	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-1.0: Dry 1.0-2.6: Moist	0.0-1.5: Dry 1.5-2.6: Moist	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---
Schweitzer-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Peshekee-----	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.0: Dry 1.0-1.6: Moist	0.0-1.6: Dry ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---
Rock outcrop.												
369F:												
Michigamme-----	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-1.0: Dry 1.0-2.6: Moist	0.0-1.5: Dry 1.5-2.6: Moist	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
369F:												
Schweitzer-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Peshekee-----	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.0: Dry 1.0-1.6: Moist	0.0-1.6: Dry ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---
Rock outcrop.												
370E:												
Peshekee-----	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.0: Dry 1.0-1.6: Moist	0.0-1.6: Dry ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---
Rock outcrop.												
370F:												
Peshekee-----	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.0: Dry 1.0-1.6: Moist	0.0-1.6: Dry ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---
Rock outcrop.												
375.												
Dumps and Pits, mine												
380:												
Beseman-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Greenwood-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
382:												
Cathro-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Arnheim-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
388:												
Gay-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Tula-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.0: Moist 5.0-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-1.0: Moist 1.0-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-0.5: Dry 0.5-6.7: Moist ---	0.0-6.7: Moist --- --- ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---
398B:												
Tula-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.0: Moist 5.0-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-1.0: Moist 1.0-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-0.5: Dry 0.5-6.7: Moist ---	0.0-6.7: Moist --- --- ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---
Gay-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Wakefield-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-1.0: Moist 1.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
418:												
Loxley-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Beseman-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
419:												
Pleine-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Cathro-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Gay-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
424:												
Gay-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
425:												
Foxpaw-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Gay-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
428C:												
Gogebic-----	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.5: Moist	0.0-1.0: Moist	0.0-1.5: Moist	0.0-6.7: Moist	0.0-1.0: Dry	0.0-1.5: Dry	0.0-6.7: Moist	0.0-1.5: Moist	0.0-1.5: Moist	0.0-6.7: Moist
	---	---	1.5-2.0: Wet	1.0-2.0: Wet	1.5-2.0: Wet	---	1.0-6.7: Moist	1.5-6.7: Moist	---	1.5-2.0: Wet	1.5-2.0: Wet	---
	---	---	2.0-6.7: Moist	2.0-6.7: Moist	2.0-6.7: Moist	---	---	---	---	2.0-6.7: Moist	2.0-6.7: Moist	---
Michigamme-----	0.0-2.6: Moist	0.0-2.6: Moist	0.0-2.6: Moist	0.0-2.6: Moist	0.0-2.6: Moist	0.0-2.6: Moist	0.0-1.0: Dry	0.0-1.5: Dry	0.0-2.6: Moist	0.0-2.6: Moist	0.0-2.6: Moist	0.0-2.6: Moist
	---	---	---	---	---	---	1.0-2.6: Moist	1.5-2.6: Moist	---	---	---	---
428D:												
Gogebic-----	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.5: Moist	0.0-1.0: Moist	0.0-1.5: Moist	0.0-6.7: Moist	0.0-1.0: Dry	0.0-1.5: Dry	0.0-6.7: Moist	0.0-1.5: Moist	0.0-1.5: Moist	0.0-6.7: Moist
	---	---	1.5-2.0: Wet	1.0-2.0: Wet	1.5-2.0: Wet	---	1.0-6.7: Moist	1.5-6.7: Moist	---	1.5-2.0: Wet	1.5-2.0: Wet	---
	---	---	2.0-6.7: Moist	2.0-6.7: Moist	2.0-6.7: Moist	---	---	---	---	2.0-6.7: Moist	2.0-6.7: Moist	---
Michigamme-----	0.0-2.6: Moist	0.0-2.6: Moist	0.0-2.6: Moist	0.0-2.6: Moist	0.0-2.6: Moist	0.0-2.6: Moist	0.0-1.0: Dry	0.0-1.5: Dry	0.0-2.6: Moist	0.0-2.6: Moist	0.0-2.6: Moist	0.0-2.6: Moist
	---	---	---	---	---	---	1.0-2.6: Moist	1.5-2.6: Moist	---	---	---	---
429B:												
Gogebic-----	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.5: Moist	0.0-1.0: Moist	0.0-1.5: Moist	0.0-6.7: Moist	0.0-1.0: Dry	0.0-1.5: Dry	0.0-6.7: Moist	0.0-1.5: Moist	0.0-1.5: Moist	0.0-6.7: Moist
	---	---	1.5-2.0: Wet	1.0-2.0: Wet	1.5-2.0: Wet	---	1.0-6.7: Moist	1.5-6.7: Moist	---	1.5-2.0: Wet	1.5-2.0: Wet	---
	---	---	2.0-6.7: Moist	2.0-6.7: Moist	2.0-6.7: Moist	---	---	---	---	2.0-6.7: Moist	2.0-6.7: Moist	---
Peshekee-----	0.0-1.6: Moist	0.0-1.6: Moist	0.0-1.6: Moist	0.0-1.6: Moist	0.0-1.6: Moist	0.0-1.6: Moist	0.0-1.0: Dry	0.0-1.6: Dry	0.0-1.6: Moist	0.0-1.6: Moist	0.0-1.6: Moist	0.0-1.6: Moist
	---	---	---	---	---	---	1.0-1.6: Moist	---	---	---	---	---
429C:												
Gogebic-----	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.5: Moist	0.0-1.0: Moist	0.0-1.5: Moist	0.0-6.7: Moist	0.0-1.0: Dry	0.0-1.5: Dry	0.0-6.7: Moist	0.0-1.5: Moist	0.0-1.5: Moist	0.0-6.7: Moist
	---	---	1.5-2.0: Wet	1.0-2.0: Wet	1.5-2.0: Wet	---	1.0-6.7: Moist	1.5-6.7: Moist	---	1.5-2.0: Wet	1.5-2.0: Wet	---
	---	---	2.0-6.7: Moist	2.0-6.7: Moist	2.0-6.7: Moist	---	---	---	---	2.0-6.7: Moist	2.0-6.7: Moist	---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
429C: Peshekee-----	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.0: Dry 1.0-1.6: Moist	0.0-1.6: Dry ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---
429D: Gogebic-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---
Peshekee-----	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.0: Dry 1.0-1.6: Moist	0.0-1.6: Dry ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---
429E: Schweitzer-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Peshekee-----	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.0: Dry 1.0-1.6: Moist	0.0-1.6: Dry ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---	0.0-1.6: Moist ---
430B: Stutts-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
430C: Stutts-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
430D: Stutts-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
430E: Stutts-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
432C: Gogebic-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---
Michigamme-----	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-1.0: Dry 1.0-2.6: Moist	0.0-1.5: Dry 1.5-2.6: Moist	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---
Rock outcrop.												
432D: Gogebic-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---
Michigamme-----	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-1.0: Dry 1.0-2.6: Moist	0.0-1.5: Dry 1.5-2.6: Moist	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---
Rock outcrop.												

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
432E:												
Schweitzer-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Michigamme-----	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-1.0: Dry 1.0-2.6: Moist	0.0-1.5: Dry 1.5-2.6: Moist	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---
Rock outcrop.												
432F:												
Schweitzer-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Michigamme-----	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-1.0: Dry 1.0-2.6: Moist	0.0-1.5: Dry 1.5-2.6: Moist	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---	0.0-2.6: Moist ---
Rock outcrop.												
433B:												
McMillan-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
433C:												
McMillan-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
433D:												
McMillan-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
435C:												
Kalkaska-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Waika-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
435D:												
Kalkaska-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Waika-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
435E:												
Kalkaska-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Waika-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
437B:												
Manitowish-----	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-3.5: Moist 3.5-6.7: Wet ---	0.0-1.5: Dry 1.5-4.5: Moist 4.5-6.7: Wet	0.0-2.5: Dry 2.5-5.5: Moist 5.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-4.0: Moist 4.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
437B: Channing-----	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-0.5: Dry 0.5-3.0: Moist 3.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---
448F: Rockland-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Rock outcrop.												
449C: Flintsteel-----	0.0-5.8: Moist 5.8-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
Minocqua-----	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet
452F: Rockland-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
460B: Belding-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-0.5: Moist 0.5-2.5: Wet 2.5-6.7: Moist	0.0-0.5: Moist 0.5-2.5: Wet 2.5-6.7: Moist	0.0-1.0: Moist 1.0-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
460B:												
Manido-----	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-3.5: Moist 3.5-6.7: Wet ---	0.0-1.5: Dry 1.5-4.5: Moist 4.5-6.7: Wet	0.0-2.0: Dry 2.0-5.0: Moist 5.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-4.0: Moist 4.0-6.7: Wet ---
461B:												
Loggerhead-----	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist
462C:												
Nonesuch-----	0.0-2.8: Moist ---	0.0-2.8: Moist ---	0.0-2.0: Moist 2.0-2.8: Wet	0.0-1.5: Moist 1.5-2.8: Wet	0.0-2.0: Moist 2.0-2.8: Wet	0.0-2.8: Moist ---	0.0-1.0: Dry 1.0-2.8: Moist	0.0-1.5: Dry 1.5-2.8: Moist	0.0-2.8: Moist ---	0.0-1.5: Moist 1.5-2.8: Wet	0.0-2.0: Moist 2.0-2.8: Wet	0.0-2.8: Moist ---
Rock outcrop.												
509:												
Cathro-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Minocqua-----	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet
511A:												
Gogebic-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
511A:												
Tula-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.0: Moist 5.0-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-1.0: Moist 1.0-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-0.5: Dry 0.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---
Chabeneau-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
519B:												
Gogebic-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---
Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
519C:												
Gogebic-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---
Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
519D:												
Gogebic-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---
Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
522. Pits, sand and gravel												
523D:												
Gogebic-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---
Karlin-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
524C:												
Waiska-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Amasa-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
524D:												
Waiska-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
524D: Amasa-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
524E: Waiska-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Amasa-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
527B: Wakefield-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-1.0: Moist 1.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist ---
527C: Wakefield-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-1.0: Moist 1.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist ---
527D: Wakefield-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-1.0: Moist 1.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
528B:												
Gogebic-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---
Annalake-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
528C:												
Gogebic-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---
Annalake-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
528D:												
Gogebic-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---
Annalake-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
551B:												
Gogebic-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---
Dishno-----	0.0-3.8: Moist ---	0.0-3.8: Moist ---	0.0-2.0: Moist 2.0-3.8: Wet	0.0-2.0: Moist 2.0-3.8: Wet	0.0-2.0: Moist 2.0-3.8: Wet	0.0-3.8: Moist ---	0.0-1.0: Dry 1.0-3.8: Moist	0.0-1.5: Dry 1.5-3.8: Moist	0.0-3.0: Moist 3.0-3.8: Wet	0.0-2.0: Moist 2.0-3.8: Wet	0.0-2.0: Moist 2.0-3.8: Wet	0.0-3.8: Moist ---
566. Beach, rubbly												
576B:												
Flintsteel-----	0.0-5.8: Moist 5.8-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
Loggerhead-----	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
576C:												
Flintsteel-----	0.0-5.8: Moist 5.8-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
Loggerhead-----	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
576D:												
Flintsteel-----	0.0-5.8: Moist 5.8-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
Loggerhead-----	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
577B:												
Loggerhead-----	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
Chabeneau-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
Arcadian-----	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Dry	0.0-1.0: Dry	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist
577C:												
Loggerhead-----	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
577C:												
Chabeneau-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
Arcadian-----	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Dry	0.0-1.0: Dry	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist
577D:												
Loggerhead-----	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
Chabeneau-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
Arcadian-----	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Dry	0.0-1.0: Dry	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist
578D:												
Arcadian-----	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Dry	0.0-1.0: Dry	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist	0.0-1.0: Moist
Keweenaw-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
625B:												
Fence-----	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
625C: Fence-----	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
626D: Sporley-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
626E: Sporley-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
648B: Annalake-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
648C: Annalake-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
650: Leafriver-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
652B:												
Manido-----	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-3.5: Moist 3.5-6.7: Wet ---	0.0-1.5: Dry 1.5-4.5: Moist 4.5-6.7: Wet	0.0-2.0: Dry 2.0-5.0: Moist 5.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-4.0: Moist 4.0-6.7: Wet ---
Annalake-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
656B:												
Stutts-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Zandi-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
656C:												
Stutts-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Zandi-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
656D:												
Stutts-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Zandi-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
680B:												
Tonkey-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Pleine-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Annalake-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
681:												
Cathro-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Tonkey-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
683B:												
Amasa-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Oldman-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-1.0: Moist 1.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
683C:												
Amasa-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Oldman-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-1.0: Moist 1.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist ---
683D:												
Amasa-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Oldman-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-1.0: Moist 1.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-6.7: Moist	0.0-1.5: Moist 1.5-2.5: Wet 2.5-6.7: Moist	0.0-6.7: Moist ---
684B:												
Amasa-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
684C:												
Amasa-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
684D:												
Amasa-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-0.5: Dry 0.5-6.7: Moist	0.0-1.0: Dry 1.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
686B:												
Annalake-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
Robago-----	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-0.5: Dry 0.5-3.0: Moist 3.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---
688:												
Cathro-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
Leafriver-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
689B:												
Chabeneau-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
Channing-----	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-0.5: Dry 0.5-3.0: Moist 3.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---
Gogebic-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
691B:												
Dishno-----	0.0-3.8: Moist ---	0.0-3.8: Moist ---	0.0-2.0: Moist 2.0-3.8: Wet	0.0-2.0: Moist 2.0-3.8: Wet	0.0-2.0: Moist 2.0-3.8: Wet	0.0-3.8: Moist ---	0.0-1.0: Dry 1.0-3.8: Moist	0.0-1.5: Dry 1.5-3.8: Moist	0.0-3.0: Moist 3.0-3.8: Wet	0.0-2.0: Moist 2.0-3.8: Wet	0.0-2.0: Moist 2.0-3.8: Wet	0.0-3.8: Moist ---
Tula-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.0: Moist 5.0-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-1.0: Moist 1.0-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-0.5: Dry 0.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---
Rock outcrop.												
691D:												
Dishno-----	0.0-3.8: Moist ---	0.0-3.8: Moist ---	0.0-2.0: Moist 2.0-3.8: Wet	0.0-2.0: Moist 2.0-3.8: Wet	0.0-2.0: Moist 2.0-3.8: Wet	0.0-3.8: Moist ---	0.0-1.0: Dry 1.0-3.8: Moist	0.0-1.5: Dry 1.5-3.8: Moist	0.0-3.0: Moist 3.0-3.8: Wet	0.0-2.0: Moist 2.0-3.8: Wet	0.0-2.0: Moist 2.0-3.8: Wet	0.0-3.8: Moist ---
Tula-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.0: Moist 5.0-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-1.0: Moist 1.0-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-0.5: Dry 0.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---
Rock outcrop.												
693B:												
Chabeneau-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-3.0: Moist 3.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
693B:												
Annalake-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
694D:												
Annalake-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-2.5: Moist 2.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-1.0: Dry 1.0-6.0: Moist 6.0-6.7: Wet	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.0: Moist 6.0-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---	0.0-4.5: Moist 4.5-6.7: Wet ---	0.0-5.0: Moist 5.0-6.7: Wet ---
Stutts-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-2.0: Dry 2.0-6.7: Moist	0.0-3.0: Dry 3.0-6.7: Moist	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-6.7: Moist ---
Arnheim-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
5170:												
Minocqua-----	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet
Pleine-----	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet
Cathro-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
5171B:												
Tula-----	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.0: Moist 5.0-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-0.5: Moist 0.5-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-1.0: Moist 1.0-2.5: Wet 2.5-4.5: Moist 4.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---	0.0-0.5: Dry 0.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-2.0: Moist 2.0-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-1.5: Moist 1.5-2.5: Wet 2.5-5.5: Moist 5.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet ---
Wormet-----	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-0.5: Dry 0.5-3.0: Moist 3.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-1.0: Moist 1.0-6.7: Wet ---	0.0-1.5: Moist 1.5-6.7: Wet ---
Gogebic-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---
5172B:												
Gogebic-----	0.0-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist ---
Pence-----	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Cathro-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---

Table 20.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	January	February	March	April	May	June	July	August	September	October	November	December
5172C:												
Gogebic-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---
Pence-----	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Cathro-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
5172D:												
Gogebic-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---
Pence-----	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Cathro-----	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet ---	0.0-6.7: Wet ---	0.0-6.7: Wet ---
5173D:												
Gogebic-----	0.0-6.7: Moist --- ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.0: Moist 1.0-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---	0.0-1.0: Dry 1.0-6.7: Moist ---	0.0-1.5: Dry 1.5-6.7: Moist ---	0.0-6.7: Moist --- ---	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-1.5: Moist 1.5-2.0: Wet 2.0-6.7: Moist	0.0-6.7: Moist --- ---
Pence-----	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist

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Table 21.--Water Features

(See text for definitions of terms used in this table. Estimates of the frequency of ponding and flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated)

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
7: Histosols-----	D	Jan-Dec	0.0	>6.0	Apparent	0.0-1.0	Very long	Frequent	---	None
Aquents-----	D	Jan-Dec	0.0	>6.0	Apparent	0.0-1.0	Very long	Frequent	---	None
10: Witbeck-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	---	---	None	---	None
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Nov	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
12A: Monico-----	C	Jan-Feb	5.5	>6.0	Apparent	---	---	None	---	None
		Mar	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Apr	0.0	2.5	Perched	---	---	None	---	None
		Apr	4.5	>6.0	Apparent	---	---	None	---	None
		May	0.5	2.5	Perched	---	---	None	---	None
		May	4.5	>6.0	Apparent	---	---	None	---	None
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	5.5	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	1.5	2.5	Perched	---	---	None	---	None
		Oct	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	1.0	2.5	Perched	---	---	None	---	None
		Nov	5.5	>6.0	Apparent	---	---	None	---	None
		Dec	1.5	2.0	Perched	---	---	None	---	None
		Dec	5.5	>6.0	Apparent	---	---	None	---	None
13B: Argonne-----	C	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
13C: Argonne-----	C	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None

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Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
13D:										
Argonne-----	C	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
15B:										
Wabeno-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	2.0	3.0	Perched	---	---	None	---	None
		Apr	1.5	3.0	Perched	---	---	None	---	None
		May	2.0	3.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.5	3.0	Perched	---	---	None	---	None
		Nov	2.0	3.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
15C:										
Wabeno-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	2.0	3.0	Perched	---	---	None	---	None
		Apr	1.5	3.0	Perched	---	---	None	---	None
		May	2.0	3.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.5	3.0	Perched	---	---	None	---	None
		Nov	2.0	3.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
16A:										
Fence-----	B	Jan	6.0	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
17B:										
Lode-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
17C:										
Lode-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
20B:										
Pence-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Lode-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
20C:										
Pence-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
21: Minocqua-----	B/D	Jan	2.0	>6.0	Apparent	---	---	None	---	None
		Feb	2.5	>6.0	Apparent	---	---	None	---	None
		Mar	1.0	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.0	>6.0	Apparent	0.5	Long	Frequent	---	None
		Jun	1.0	>6.0	Apparent	---	---	None	---	None
		Jul	2.0	>6.0	Apparent	---	---	None	---	None
		Aug	2.5	>6.0	Apparent	---	---	None	---	None
		Sep	1.5	>6.0	Apparent	---	---	None	---	None
		Oct	0.5	>6.0	Apparent	---	---	None	---	None
		Nov	0.0	>6.0	Apparent	---	---	None	---	None
		Dec	0.5	>6.0	Apparent	---	---	None	---	None
Leafriver-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	---	---	None	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
23B: Chabeneau-----	B	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Pence-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
26B: Stambaugh-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
27: Lupton-----	A/D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
Tawas-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
28:										
Dawson-----	A/D	Jan-Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul-Aug	0.5	>6.0	Apparent	---	---	None	---	None
		Sep	0.0	>6.0	Apparent	---	---	None	---	None
		Oct	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Nov	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Dec	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
Greenwood-----	A/D	Jan-Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul-Aug	0.5	>6.0	Apparent	---	---	None	---	None
		Sep	0.0	>6.0	Apparent	---	---	None	---	None
		Oct	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Nov	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Dec	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
Loxley-----	A/D	Jan-Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul-Aug	0.5	>6.0	Apparent	---	---	None	---	None
		Sep	0.0	>6.0	Apparent	---	---	None	---	None
		Oct	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Nov	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Dec	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
29B:										
Pence, very deep water table-----	B	Jan-Feb	10.5	>6.0	Apparent	---	---	None	---	None
		Mar	9.7	>6.0	Apparent	---	---	None	---	None
		Apr-May	9.2	>6.0	Apparent	---	---	None	---	None
		Jun	10.5	>6.0	Apparent	---	---	None	---	None
		Jul	12.4	>6.0	Apparent	---	---	None	---	None
		Aug	12.5	>6.0	Apparent	---	---	None	---	None
		Sep	9.4	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	7.9	>6.0	Apparent	---	---	None	---	None
		Dec	8.9	>6.0	Apparent	---	---	None	---	None
31:										
Evart-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	Brief	Occasional
		Apr-May	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	Long	Frequent
		Jun	0.5	>6.0	Apparent	---	---	None	Brief	Occasional
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	Brief	Occasional
		Oct	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	Brief	Occasional
		Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
Tawas-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
32A: Net-----	C	Jan-Feb	5.5	>6.0	Apparent	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Apr-May	0.5	2.5	Perched	---	---	None	---	None
		Apr-May	4.5	>6.0	Apparent	---	---	None	---	None
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Apr-Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	5.5	>6.0	Apparent	---	---	None	---	None
		Aug	0.5	>6.0	Apparent	---	---	None	---	None
		Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Oct	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Oct-Nov	5.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.5	>6.0	Apparent	---	---	None	---	None
35A: Beechwood-----	C	Jan-Mar	1.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.5	>6.0	Apparent	---	---	None	---	None
		Jun	2.0	>6.0	Apparent	---	---	None	---	None
		Jul	2.5	>6.0	Apparent	---	---	None	---	None
		Aug	3.0	>6.0	Apparent	---	---	None	---	None
		Sep	2.5	>6.0	Apparent	---	---	None	---	None
		Oct	1.5	>6.0	Apparent	---	---	None	---	None
		Nov-Dec	1.0	>6.0	Apparent	---	---	None	---	None
36: Gay-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	---	---	None	---	None
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
Pleine-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Jul	1.0	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.5	>6.0	Apparent	---	---	None	---	None
		Oct	0.5	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
37B: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
37B:										
Tula-----	C	Jan-Feb	5.5	>6.0	Apparent	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Mar	5.0	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.5	2.5	Perched	---	---	None	---	None
		Apr-May	4.5	>6.0	Apparent	---	---	None	---	None
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	5.5	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Oct	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	5.5	>6.0	Apparent	---	---	None	---	None
Lupton-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
38B:										
Gogebic, sandy substratum-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
38C:										
Gogebic, sandy substratum-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
38D:										
Gogebic, sandy substratum-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
39B: Gogebic, sandy substratum-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
39C: Gogebic, sandy substratum-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
39D: Gogebic, sandy substratum-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
41: Lupton-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
Pleine-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Jul	1.0	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.5	>6.0	Apparent	---	---	None	---	None
		Oct	0.5	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
Cathro-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
42:										
Ausable-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	---	---	None	Brief	Occasional
		Apr-May	0.0	>6.0	Apparent	---	---	None	Brief	Frequent
		Jun	0.0	>6.0	Apparent	---	---	None	Brief	Occasional
		Jul	0.5	>6.0	Apparent	---	---	None	Brief	Occasional
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	Brief	Occasional
		Oct-Nov	0.0	>6.0	Apparent	---	---	None	Brief	Occasional
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
Tawas-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
43B:										
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Pence-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
43C:										
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Pence-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
43D:										
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Pence-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
44B:										
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Keweenaw-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Sarona, dense substratum-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
44C:										
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Keweenaw-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Sarona, dense substratum-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
44D:										
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Keweenaw-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Sarona, dense substratum-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
46C:										
Amasa-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
46D:										
Amasa-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
46E:										
Amasa-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
46F:										
Amasa-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
47B:										
Karlin, very deep water table-----	A	Jan-Feb	10.5	>6.0	Apparent	---	---	None	---	None
		Mar	9.7	>6.0	Apparent	---	---	None	---	None
		Apr-May	9.2	>6.0	Apparent	---	---	None	---	None
		Jun	10.5	>6.0	Apparent	---	---	None	---	None
		Jul	12.4	>6.0	Apparent	---	---	None	---	None
		Aug	12.5	>6.0	Apparent	---	---	None	---	None
		Sep	9.4	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	7.9	>6.0	Apparent	---	---	None	---	None
		Dec	8.9	>6.0	Apparent	---	---	None	---	None
Noseum-----	A	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar-Jun	2.0	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep-Nov	2.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None
Gay-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	---	---	None	---	None
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
48C:										
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Michigamme-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
48F:										
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Michigamme-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
49B: Pelissier-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Sarwet-----	C	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
49C: Pelissier-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Sarwet-----	C	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
49D: Pelissier-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
52B: Pence-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Vilas-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
52C: Pence-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Vilas-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
53B: Manitowish-----	B	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	3.5	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep	4.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	3.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
53B:										
Croswell-----	A	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	3.5	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep	4.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	3.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None
57B:										
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Manitowish-----	B	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	3.5	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep	4.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	3.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None
57C:										
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Manitowish-----	B	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	3.5	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep	4.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	3.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None
58B:										
Vilas, very deep water table-----	A	Jan-Feb	10.5	>6.0	Apparent	---	---	None	---	None
		Mar	9.7	>6.0	Apparent	---	---	None	---	None
		Apr-May	9.2	>6.0	Apparent	---	---	None	---	None
		Jun	10.5	>6.0	Apparent	---	---	None	---	None
		Jul	12.4	>6.0	Apparent	---	---	None	---	None
		Aug	12.5	>6.0	Apparent	---	---	None	---	None
		Sep	9.4	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	7.9	>6.0	Apparent	---	---	None	---	None
		Dec	8.9	>6.0	Apparent	---	---	None	---	None
Croswell-----	A	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	3.5	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep	4.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	3.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
58B: Pence, very deep water table-----	B	Jan-Feb	10.5	>6.0	Apparent	---	---	None	---	None
		Mar	9.7	>6.0	Apparent	---	---	None	---	None
		Apr-May	9.2	>6.0	Apparent	---	---	None	---	None
		Jun	10.5	>6.0	Apparent	---	---	None	---	None
		Jul	12.4	>6.0	Apparent	---	---	None	---	None
		Aug	12.5	>6.0	Apparent	---	---	None	---	None
		Sep	9.4	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	7.9	>6.0	Apparent	---	---	None	---	None
		Dec	8.9	>6.0	Apparent	---	---	None	---	None
61: Tawas-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
Kinross-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	0.0-0.5	Very brief	Rare	---	None
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
62B: Pelkie-----	A	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	4.5	>6.0	Apparent	---	---	None	Brief	Occasional
		Apr	2.5	>6.0	Apparent	---	---	None	Brief	Occasional
		May	3.5	>6.0	Apparent	---	---	None	Brief	Occasional
		Jun-Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	5.0	>6.0	Apparent	---	---	None	---	None
		Oct	4.5	>6.0	Apparent	---	---	None	---	None
		Nov	2.5	>6.0	Apparent	---	---	None	---	None
		Dec	4.5	>6.0	Apparent	---	---	None	---	None
83: Bowstring-----	B/D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	---	Brief	Frequent	Brief	Frequent
		Apr-May	0.0	>6.0	Apparent	---	Long	Frequent	Long	Frequent
		Jun	0.0	>6.0	Apparent	---	Brief	Frequent	Brief	Frequent
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	---	Brief	Frequent	Brief	Occasional
		Dec	0.0	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
141D: Oldman-----	C	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Apr	1.0	2.5	Perched	---	---	None	---	None
		May	1.5	2.5	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
141E: Oldman-----	C	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Apr	1.0	2.5	Perched	---	---	None	---	None
		May	1.5	2.5	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
141F: Porkies-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
214B: Amnicon-----	D	Jan-Mar	>6.0	>6.0	---	---	---	None	---	None
		Apr-Jun	1.0	1.5-1.5	Perched	---	---	None	---	None
		Jul-Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep-Dec	1.0	1.5-1.5	Perched	---	---	None	---	None
Bergland-----	D	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	0.0	1.5-1.5	Perched	0.0-1.0	Brief	Occasional	---	None
		Apr-May	0.0	1.5-1.5	Perched	0.0-1.0	Long	Frequent	---	None
		Jun	0.5	1.5-1.5	Perched	---	---	None	---	None
		Jul-Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	0.5	1.5-1.5	Perched	---	---	None	---	None
		Oct-Nov	0.0	1.5-1.5	Perched	0.0-1.0	Brief	Frequent	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
216B: Amnicon-----	D	Jan-Mar	>6.0	>6.0	---	---	---	None	---	None
		Apr-Jun	1.0	1.5-1.5	Perched	---	---	None	---	None
		Jul-Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep-Dec	1.0	1.5-1.5	Perched	---	---	None	---	None
217A: Cuttre-----	D	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Apr-May	0.5	2.5	Perched	---	---	None	---	None
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Jul-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
218: Bergland-----	D	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	0.0	1.5-1.5	Perched	0.0-1.0	Brief	Occasional	---	None
		Apr-May	0.0	1.5-1.5	Perched	0.0-1.0	Long	Frequent	---	None
		Jun	0.5	1.5-1.5	Perched	---	---	None	---	None
		Jul-Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	0.5	1.5-1.5	Perched	---	---	None	---	None
		Oct-Nov	0.0	1.5-1.5	Perched	0.0-1.0	Brief	Frequent	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
219B: Payseor-----	D	Jan-Feb	5.5	>6.0	Apparent	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Mar	5.0	>6.0	Apparent	---	---	None	---	None
		Apr	0.0	2.5	Perched	---	---	None	---	None
		Apr	4.5	>6.0	Apparent	---	---	None	---	None
		May	0.5	2.5	Perched	---	---	None	---	None
		Apr-May	4.5	>6.0	Apparent	---	---	None	---	None
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Apr-Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	5.5	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Oct	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Oct-Nov	5.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.5	>6.0	Apparent	---	---	None	---	None
Froberg-----	D	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	2.0	2.5	Perched	---	---	None	---	None
		Apr	1.5	2.5	Perched	---	---	None	---	None
		May	2.0	2.5	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.5	2.6-2.6	Perched	---	---	None	---	None
		Nov	2.0	2.5	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
222: Matchwood-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-1.0	Brief	Occasional	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	---	---	None	---	None
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-1.0	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
225A: Cuttre-----	D	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Apr-May	0.5	2.5	Perched	---	---	None	---	None
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Jul-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
225A: Bergland-----	D	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	0.0	1.5-1.5	Perched	0.0-1.0	Brief	Occasional	---	None
		Apr-May	0.0	1.5-1.5	Perched	0.0-1.0	Long	Frequent	---	None
		Jun	0.5	1.5-1.5	Perched	---	---	None	---	None
		Jul-Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	0.5	1.5-1.5	Perched	---	---	None	---	None
		Oct-Nov	0.0	1.5-1.5	Perched	0.0-1.0	Brief	Frequent	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
226B: Froberg-----	D	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	2.0	2.5	Perched	---	---	None	---	None
		Apr	1.5	2.5	Perched	---	---	None	---	None
		May	2.0	2.5	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.5	2.6-2.6	Perched	---	---	None	---	None
		Nov	2.0	2.5	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
230B: Moquah-----	B	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	4.5	>6.0	Apparent	---	---	None	Brief	Rare
		Apr-May	3.5	>6.0	Apparent	---	---	None	Brief	Rare
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	5.0	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep	5.0	>6.0	Apparent	---	---	None	---	None
		Oct	4.5	>6.0	Apparent	---	---	None	---	None
		Nov	3.5	>6.0	Apparent	---	---	None	---	None
		Dec	4.5	>6.0	Apparent	---	---	None	---	None
Arnheim-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	Long	Frequent
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	Long	Frequent
		Jun	0.5	>6.0	Apparent	---	---	None	Brief	Frequent
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	Brief	Occasional
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
231: Matchwood-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-1.0	Brief	Occasional	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	---	---	None	---	None
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-1.0	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
Dorval-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
233: Schaat Creek-----	B/D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar-May	0.0	>6.0	Apparent	---	---	None	Long	Frequent
		Jun	0.5	>6.0	Apparent	---	---	None	---	None
		Jul	1.0	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.5	>6.0	Apparent	---	---	None	---	None
		Oct	0.5	>6.0	Apparent	---	---	None	---	None
		Nov-Dec	0.0	>6.0	Apparent	---	---	None	---	None
239D: Miskoaki-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
277B: Kellogg, sandy substratum-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar-May	1.5	2.5	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Allendale-----	C	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Apr-May	0.5	2.5	Perched	---	---	None	---	None
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Jul-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
280B: Flintsteel-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar-May	1.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	1.0	>6.0	Apparent	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
280C: Flintsteel-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar-May	1.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	1.0	>6.0	Apparent	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
282B:										
Big Iron-----	C	Jan-Mar	0.5	2.0	Perched	---	---	None	---	None
		Mar	6.0	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.5	2.5	Perched	---	---	None	---	None
		Apr-May	5.0	>6.0	Apparent	---	---	None	---	None
		Jun	5.0	>6.0	Apparent	---	---	None	---	None
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Jul	>6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	6.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.5	2.0	Perched	---	---	None	---	None
		Dec	0.5	2.0	Perched	---	---	None	---	None
Flintsteel-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar-May	1.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	1.0	>6.0	Apparent	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
283B:										
Loggerhead-----	B	Jan-May	1.0	3.5-3.5	Perched	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov-Dec	1.0	3.5-3.5	Perched	---	---	None	---	None
Noseum-----	A	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar-Jun	2.0	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep-Nov	2.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None
Ubyl-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
283C:										
Loggerhead-----	B	Jan-May	1.0	3.5-3.5	Perched	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov-Dec	1.0	3.5-3.5	Perched	---	---	None	---	None
Noseum-----	A	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar-Jun	2.0	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep-Nov	2.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None
Ubyl-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
284:										
Aquents-----	D	Jan-Dec	0.0	>6.0	Apparent	0.0-1.0	Very long	Frequent	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
284: Gull Point-----	C	Jan	0.0	>6.0	Apparent	---	---	None	Long	Occasional
		Feb-May	0.0	>6.0	Apparent	---	---	None	Long	Frequent
		Jun	0.0	>6.0	Apparent	---	---	None	Brief	Frequent
		Jul	1.0	>6.0	Apparent	---	---	None	Brief	Occasional
		Aug-Sep	2.0	>6.0	Apparent	---	---	None	---	None
		Oct	1.5	>6.0	Apparent	---	---	None	---	None
		Nov	1.0	>6.0	Apparent	---	---	None	Brief	Occasional
		Dec	0.0	>6.0	Apparent	---	---	None	Long	Occasional
285F: Rockland-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Arnheim-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	Long	Frequent
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	Long	Frequent
		Jun	0.5	>6.0	Apparent	---	---	None	Brief	Frequent
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	Brief	Occasional
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
286A: Big Iron-----	C	Jan-Feb	0.5	2.0	Perched	---	---	None	---	None
		Mar	6.0	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.5	2.5	Perched	---	---	None	---	None
		Apr-May	5.0	>6.0	Apparent	---	---	None	---	None
		Jun	5.0	>6.0	Apparent	---	---	None	---	None
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	6.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.5	2.0	Perched	---	---	None	---	None
		Dec	0.5	2.0	Perched	---	---	None	---	None
Belding-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Apr-May	0.5	2.5	Perched	---	---	None	---	None
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Jul-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
287: Trap Falls-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.7	Long	Occasional	---	None
		Apr	0.0	>6.0	Apparent	0.0-0.7	Very long	Frequent	---	None
		May	0.0	>6.0	Apparent	0.0-0.7	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	---	---	None	---	None
		Jul	1.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	2.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.3	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
Tonkey-----	C	Jan-May	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	---	---	None	---	None
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Dec	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
289B: Amasa-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
290B: Flintsteel-----	B	Jan-Apr	>6.0	>6.0	---	---	---	None	---	None
		Mar-Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Jun-Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Jul-Aug	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Nov	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	5.0	>6.0	Apparent	---	---	None	---	None
		Nov-Dec	1.0	>6.0	Apparent	---	---	None	---	None
290C: Flintsteel-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar-May	1.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	1.0	>6.0	Apparent	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
291B: Kalkaska-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
291D: Kalkaska-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
292B: Manido-----	B	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	3.5	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep	4.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	3.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None
Richter-----	B	Jan-Mar	1.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.5	>6.0	Apparent	---	---	None	---	None
		Jun	2.0	>6.0	Apparent	---	---	None	---	None
		Jul	2.5	>6.0	Apparent	---	---	None	---	None
		Aug	3.0	>6.0	Apparent	---	---	None	---	None
		Sep	2.5	>6.0	Apparent	---	---	None	---	None
		Oct	1.5	>6.0	Apparent	---	---	None	---	None
		Nov-Dec	1.0	>6.0	Apparent	---	---	None	---	None
293A: Wainola-----	B	Jan-Feb	1.5	>6.0	Apparent	---	---	None	---	None
		Mar	1.0	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.5	>6.0	Apparent	---	---	None	---	None
		Jun	1.0	>6.0	Apparent	---	---	None	---	None
		Jul	2.0	>6.0	Apparent	---	---	None	---	None
		Aug	3.0	>6.0	Apparent	---	---	None	---	None
		Sep	2.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	1.0	>6.0	Apparent	---	---	None	---	None
		Dec	1.5	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
293A:										
Trap Falls-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.7	Long	Occasional	---	None
		Apr	0.0	>6.0	Apparent	0.0-0.7	Very long	Frequent	---	None
		May	0.0	>6.0	Apparent	0.0-0.7	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	---	---	None	---	None
		Jul	1.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	2.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.3	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
296B:										
Manido-----	B	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	3.5	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep	4.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	3.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None
Fence-----	B	Jan	6.0	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
Gogebic, sandy substratum-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
296D:										
Manido-----	B	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	3.5	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep	4.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	3.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None
Sporley-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
296D: Gogebic, sandy substratum-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
299B: Zandi-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Amasa-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Flintsteel-----	B	Jan	5.8	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
299C: Zandi-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Amasa-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Flintsteel-----	B	Jan	5.8	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
301A: Moodig-----	C	Jan-Feb	4.0	5.0-5.0	Perched	---	---	None	---	None
		Mar	2.0	5.0-5.0	Perched	---	---	None	---	None
		Apr	0.5	5.0-5.0	Perched	---	---	None	---	None
		May	1.0	5.0-5.0	Perched	---	---	None	---	None
		Jun	3.0	5.0-5.0	Perched	---	---	None	---	None
		Jul-Aug	4.5	5.0-5.0	Perched	---	---	None	---	None
		Sep	4.0	5.0-5.0	Perched	---	---	None	---	None
		Oct	2.0	5.0-5.0	Perched	---	---	None	---	None
		Nov	1.5	5.0-5.0	Perched	---	---	None	---	None
		Dec	2.0	5.0-5.0	Perched	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
302B: Manitowish-----	B	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	3.5	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep	4.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	3.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None
302C: Manitowish-----	B	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	3.5	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep	4.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	3.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None
303: Bowstring-----	B/D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	---	Brief	Frequent	Brief	Frequent
		Apr-May	0.0	>6.0	Apparent	---	Long	Frequent	Long	Frequent
		Jun	0.0	>6.0	Apparent	---	Brief	Frequent	Brief	Frequent
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	---	Brief	Frequent	Brief	Occasional
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
Arnheim-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	Long	Frequent
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	Long	Frequent
		Jun	0.5	>6.0	Apparent	---	---	None	Brief	Frequent
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	Brief	Occasional
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
305B: Keweenaw-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Siskiwit-----	A	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	3.5	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep	4.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	3.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None
305C: Keweenaw-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
305C: Siskiwit-----	A	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	3.5	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep	4.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	3.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None
307: Lupton-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
Cathro-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
309: Cathro-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
310B: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
310C: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
310D: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
310E: Schweitzer-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
311B: Tula-----	C	Jan-Feb	5.5	>6.0	Apparent	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Mar	5.0	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.5	2.5	Perched	---	---	None	---	None
		Apr-May	4.5	>6.0	Apparent	---	---	None	---	None
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	5.5	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Oct	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	5.5	>6.0	Apparent	---	---	None	---	None
Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
312A: Tula-----	C	Jan-Feb	5.5	>6.0	Apparent	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Mar	5.0	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.5	2.5	Perched	---	---	None	---	None
		Apr-May	4.5	>6.0	Apparent	---	---	None	---	None
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	5.5	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Oct	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	5.5	>6.0	Apparent	---	---	None	---	None
Foxpaw-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	---	---	None	---	None
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
312A: Gay-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	---	---	None	---	None
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
316: Gay-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	---	---	None	---	None
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
317B: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
317C: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
317D: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
319B: McMillan-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Noseum-----	A	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar-Jun	2.0	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep-Nov	2.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
319C: McMillan-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Islandlake-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
319D: McMillan-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Islandlake-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
319E: McMillan-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Islandlake-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
322B: Stutts-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Keweenaw-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
322C: Stutts-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Keweenaw-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
322D: Stutts-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Keweenaw-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
323B: Keweenaw-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Kalkaska-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
323C: Keweenaw-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Kalkaska-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
323D: Keweenaw-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Kalkaska-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
325B: Siskiwit-----	B	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	3.5	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep	4.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	3.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
325B: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
325C: Siskiwit-----	B	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	3.5	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep	4.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	3.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None
Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
327: Foxpaw-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	---	---	None	---	None
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
Sarwet-----	C	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
328B: Annalake-----	B	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
328C: Annalake-----	B	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
328D: Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Zandi-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
329A: Tula-----	C	Jan-Feb	5.5	>6.0	Apparent	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Mar	5.0	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.5	2.5	Perched	---	---	None	---	None
		Apr-May	4.5	>6.0	Apparent	---	---	None	---	None
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	5.5	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Oct	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	5.5	>6.0	Apparent	---	---	None	---	None
351B: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
351C: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
351D: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
351E: Schweitzer-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
351F: Schweitzer-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
353A: Tula-----	C	Jan-Feb	5.5	>6.0	Apparent	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Mar	5.0	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.5	2.5	Perched	---	---	None	---	None
		Apr-May	4.5	>6.0	Apparent	---	---	None	---	None
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	5.5	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Oct	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	5.5	>6.0	Apparent	---	---	None	---	None
354B: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
354C: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
354D: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
354E: Schweitzer-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
354F: Schweitzer-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
363C: Talus.										
Arcadian-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
363D: Talus.										
Arcadian-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
363E: Talus.										
Arcadian-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
363F: Talus.										
Arcadian-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
364F. Talus										
365F. Rock outcrop										
369C: Dishno-----	C	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar-May	2.0	3.8-3.8	Perched	---	---	None	---	None
		Jun-Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	3.0	3.8-3.8	Perched	---	---	None	---	None
		Oct-Nov	2.0	3.8-3.8	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Peshekee-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop.										

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
369D:										
Dishno-----	C	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar-May	2.0	3.8-3.8	Perched	---	---	None	---	None
		Jun-Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	3.0	3.8-3.8	Perched	---	---	None	---	None
		Oct-Nov	2.0	3.8-3.8	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Peshekee-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop.										
369E:										
Michigamme-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Schweitzer-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Peshekee-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop.										
369F:										
Michigamme-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Schweitzer-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Peshekee-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop.										
370E:										
Peshekee-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop.										
370F:										
Peshekee-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop.										
375.										
Dumps and Pits, mine										
380:										
Beseman-----	D	Jan-Feb	0.0	>6.0	Apparent	0.0-1.0	Brief	Rare	---	None
		Mar	0.0	>6.0	Apparent	0.0-1.0	Brief	Occasional	---	None
		Apr	0.0	>6.0	Apparent	0.0-1.0	Very long	Frequent	---	None
		May	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-1.0	Brief	Occasional	---	None
		Jul-Aug	0.5	>6.0	Apparent	0.0-0.0	---	None	---	None
		Sep-Nov	0.0	>6.0	Apparent	0.0-1.0	Brief	Occasional	---	None
		Dec	0.0	>6.0	Apparent	0.0-1.0	Brief	Rare	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
380: Greenwood-----	D	Jan-Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul-Aug	0.5	>6.0	Apparent	---	---	None	---	None
		Sep	0.0	>6.0	Apparent	---	---	None	---	None
		Oct	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Nov	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Dec	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
382: Cathro-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
Arnheim-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	Long	Frequent
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	Long	Frequent
		Jun	0.5	>6.0	Apparent	---	---	None	Brief	Frequent
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	Brief	Occasional
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
388: Gay-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	---	---	None	---	None
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
Tula-----	C	Jan-Feb	5.5	>6.0	Apparent	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Mar	5.0	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.5	2.5	Perched	---	---	None	---	None
		Apr-May	4.5	>6.0	Apparent	---	---	None	---	None
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	5.5	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Oct	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	5.5	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
398B:										
Tula-----	C	Jan-Feb	5.5	>6.0	Apparent	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Mar	5.0	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.5	2.5	Perched	---	---	None	---	None
		Apr-May	4.5	>6.0	Apparent	---	---	None	---	None
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	5.5	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Oct	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	5.5	>6.0	Apparent	---	---	None	---	None
Gay-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	---	---	None	---	None
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
Wakefield-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Apr	1.0	2.5	Perched	---	---	None	---	None
		May	1.5	2.5	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
418:										
Loxley-----	D	Jan-Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul-Aug	0.5	>6.0	Apparent	---	---	None	---	None
		Sep	0.0	>6.0	Apparent	---	---	None	---	None
		Oct	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Nov	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Dec	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
Beseman-----	D	Jan-Feb	0.0	>6.0	Apparent	0.0-1.0	Brief	Rare	---	None
		Mar	0.0	>6.0	Apparent	0.0-1.0	Brief	Occasional	---	None
		Apr	0.0	>6.0	Apparent	0.0-1.0	Very long	Frequent	---	None
		May	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-1.0	Brief	Occasional	---	None
		Jul-Aug	0.5	>6.0	Apparent	0.0-0.0	---	None	---	None
		Sep-Nov	0.0	>6.0	Apparent	0.0-1.0	Brief	Occasional	---	None
		Dec	0.0	>6.0	Apparent	0.0-1.0	Brief	Rare	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
419: Pleine-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Jul	1.0	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.5	>6.0	Apparent	---	---	None	---	None
		Oct	0.5	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
Cathro-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
Gay-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	---	---	None	---	None
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
424: Gay-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	---	---	None	---	None
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
425: Foxpaw-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	---	---	None	---	None
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
425: Gay-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	---	---	None	---	None
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
428C: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Michigamme-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
428D: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Michigamme-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
429B: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Peshekee-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
429C: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Peshekee-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
429D: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Peshekee-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
429E: Schweitzer-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Peshekee-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
430B: Stutts-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
430C: Stutts-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
430D: Stutts-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
430E: Stutts-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
432C: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Michigamme-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop.										
432D: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Michigamme-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop.										
432E: Schweitzer-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Michigamme-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop.										

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
432F: Schweitzer-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Michigamme-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop.										
433B: McMillan-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
433C: McMillan-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
433D: McMillan-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
435C: Kalkaska-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Waiska-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
435D: Kalkaska-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Waiska-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
435E: Kalkaska-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Waiska-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
437B: Manitowish-----	B	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	3.5	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep	4.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	3.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None
Channing-----	B	Jan-Mar	1.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.5	>6.0	Apparent	---	---	None	---	None
		Jun	2.0	>6.0	Apparent	---	---	None	---	None
		Jul	2.5	>6.0	Apparent	---	---	None	---	None
		Aug	3.0	>6.0	Apparent	---	---	None	---	None
		Sep	2.5	>6.0	Apparent	---	---	None	---	None
		Oct	1.5	>6.0	Apparent	---	---	None	---	None
		Nov-Dec	1.0	>6.0	Apparent	---	---	None	---	None
448F: Rockland-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop.										

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
449C: Flintsteel-----	B	Jan	5.8	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
Minocqua-----	B/D	Jan	2.0	>6.0	Apparent	---	---	None	---	None
		Feb	2.5	>6.0	Apparent	---	---	None	---	None
		Mar	1.0	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.0	>6.0	Apparent	0.5	Long	Frequent	---	None
		Jun	1.0	>6.0	Apparent	---	---	None	---	None
		Jul	2.0	>6.0	Apparent	---	---	None	---	None
		Aug	2.5	>6.0	Apparent	---	---	None	---	None
		Sep	1.5	>6.0	Apparent	---	---	None	---	None
		Oct	0.5	>6.0	Apparent	---	---	None	---	None
		Nov	0.0	>6.0	Apparent	---	---	None	---	None
		Dec	0.5	>6.0	Apparent	---	---	None	---	None
452F: Rockland-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
460B: Belding-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Apr-May	0.5	2.5	Perched	---	---	None	---	None
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Jul-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Manido-----	B	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	3.5	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep	4.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	3.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None
461B: Loggerhead-----	B	Jan-May	1.0	3.5-3.5	Perched	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov-Dec	1.0	3.5-3.5	Perched	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
462C: Nonesuch-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	2.0	2.8-2.8	Perched	---	---	None	---	None
		Apr	1.5	2.8-2.8	Perched	---	---	None	---	None
		May	2.0	2.8-2.8	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	1.5	2.8-2.8	Perched	---	---	None	---	None
		Nov	2.0	2.8-2.8	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop.										
509: Cathro-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
Minocqua-----	D	Jan	2.0	>6.0	Apparent	---	---	None	---	None
		Feb	2.5	>6.0	Apparent	---	---	None	---	None
		Mar	1.0	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.0	>6.0	Apparent	0.5	Long	Frequent	---	None
		Jun	1.0	>6.0	Apparent	---	---	None	---	None
		Jul	2.0	>6.0	Apparent	---	---	None	---	None
		Aug	2.5	>6.0	Apparent	---	---	None	---	None
		Sep	1.5	>6.0	Apparent	---	---	None	---	None
		Oct	0.5	>6.0	Apparent	---	---	None	---	None
		Nov	0.0	>6.0	Apparent	---	---	None	---	None
		Dec	0.5	>6.0	Apparent	---	---	None	---	None
511A: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Tula-----	C	Jan-Feb	5.5	>6.0	Apparent	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Mar	5.0	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.5	2.5	Perched	---	---	None	---	None
		Apr-May	4.5	>6.0	Apparent	---	---	None	---	None
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	5.5	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Oct	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	5.5	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
511A: Chabeneau-----	B	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
519B: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
519C: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
519D: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
522. Pits, sand and gravel										
523D: Gogebic, sandy substratum-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Karlin-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
524C: Waiska-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Amasa-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
524D: Waiska-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Amasa-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
524E: Waiska-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Amasa-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
527B: Wakefield-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Apr	1.0	2.5	Perched	---	---	None	---	None
		May	1.5	2.5	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
527C: Wakefield-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Apr	1.0	2.5	Perched	---	---	None	---	None
		May	1.5	2.5	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
527D: Wakefield-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Apr	1.0	2.5	Perched	---	---	None	---	None
		May	1.5	2.5	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
528B: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
528B: Annalake-----	B	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
528C: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Annalake-----	B	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
528D: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Annalake-----	B	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
551B: Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Dishno-----	C	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar-May	2.0	3.8-3.8	Perched	---	---	None	---	None
		Jun-Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	3.0	3.8-3.8	Perched	---	---	None	---	None
		Oct-Nov	2.0	3.8-3.8	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
566. Beach, rubbly										
576B: Flintsteel-----	B	Jan	5.8	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
Loggerhead-----	B	Jan	6.0	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
576C: Flintsteel-----	B	Jan	5.8	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
576C: Loggerhead-----	B	Jan	6.0	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
576D: Flintsteel-----	B	Jan	5.8	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
Loggerhead-----	B	Jan	6.0	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
577B: Loggerhead-----	B	Jan	6.0	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
577B: Chabeneau-----	B	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
Arcadian-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
577C: Loggerhead-----	B	Jan	6.0	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
Chabeneau-----	B	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
Arcadian-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
577D: Loggerhead-----	B	Jan	6.0	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
577D: Chabeneau-----	B	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
Arcadian-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
578D: Arcadian-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Keweenaw-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
625B: Fence-----	B	Jan	6.0	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
625C: Fence-----	B	Jan	6.0	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
626D: Sporley-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
626E: Sporley-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
648B: Annalake-----	B	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
648C: Annalake-----	B	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
650: Leafriver-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	---	---	None	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
652B: Manido-----	B	Jan-Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	3.5	>6.0	Apparent	---	---	None	---	None
		Jul	4.5	>6.0	Apparent	---	---	None	---	None
		Aug	5.5	>6.0	Apparent	---	---	None	---	None
		Sep	4.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	3.0	>6.0	Apparent	---	---	None	---	None
		Dec	4.0	>6.0	Apparent	---	---	None	---	None
Annalake-----	B	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
656B: Stutts-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Zandi-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
656C: Stutts-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Zandi-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
656D: Stutts-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Zandi-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
680B: Tonkey-----	C	Jan-May Jun Jul Aug Sep Oct-Dec	0.0 0.5 1.5 2.0 1.0 0.0	>6.0 >6.0 >6.0 >6.0 >6.0 >6.0	Apparent Apparent Apparent Apparent Apparent Apparent	0.0-1.0 --- --- --- --- 0.0-1.0	Long --- --- --- --- Long	Frequent None None None None Frequent	--- --- --- --- --- ---	None None None None None None
Pleine-----	D	Jan-Feb Mar Apr-May Jun Jul Aug Sep Oct Nov Dec	0.0 0.0 0.0 0.5 1.0 2.0 1.5 0.5 0.0 0.0	>6.0 >6.0 >6.0 >6.0 >6.0 >6.0 >6.0 >6.0 >6.0 >6.0	Apparent Apparent Apparent Apparent Apparent Apparent Apparent Apparent Apparent Apparent	--- 0.0-0.5 0.0-0.5 0.0-0.5 --- --- --- 0.0-0.5 0.0-0.5 ---	--- Brief Long Brief --- --- --- Brief Brief ---	None Occasional Frequent Occasional None None None Frequent Frequent None	--- --- --- --- --- --- --- --- --- ---	None None None None None None None None None None
Annalake-----	B	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	5.5 5.0 2.5 1.5 2.0 4.5 6.0 >6.0 6.0 5.0 4.5 5.0	>6.0 >6.0 >6.0 >6.0 >6.0 >6.0 >6.0 >6.0 >6.0 >6.0 >6.0 >6.0	Apparent Apparent Apparent Apparent Apparent Apparent Apparent --- Apparent Apparent Apparent Apparent	--- --- --- --- --- --- --- --- --- --- --- ---	--- --- --- --- --- --- --- --- --- --- --- ---	None None None None None None None None None None None None	--- --- --- --- --- --- --- --- --- --- --- ---	None None None None None None None None None None None None
681: Cathro-----	A/D	Jan-Feb Mar Apr-May Jun Jul Aug Sep Oct-Nov Dec	0.0 0.0 0.0 0.0 0.5 1.0 0.5 0.0 0.0	>6.0 >6.0 >6.0 >6.0 >6.0 >6.0 >6.0 >6.0 >6.0	Apparent Apparent Apparent Apparent Apparent Apparent Apparent Apparent Apparent	--- 0.0-0.5 0.0-0.5 0.0-0.5 --- --- --- 0.0-0.5 ---	--- Brief Long Brief --- --- --- Brief ---	None Frequent Frequent Frequent None None None Frequent None	--- --- --- --- --- --- --- --- ---	None None None None None None None None None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
681: Tonkey-----	C	Jan-May	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
		Jun	0.5	>6.0	Apparent	---	---	None	---	None
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Dec	0.0	>6.0	Apparent	0.0-1.0	Long	Frequent	---	None
683B: Amasa-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Oldman-----	C	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Apr	1.0	2.5	Perched	---	---	None	---	None
		May	1.5	2.5	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
683C: Amasa-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Oldman-----	C	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Apr	1.0	2.5	Perched	---	---	None	---	None
		May	1.5	2.5	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
683D: Amasa-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Oldman-----	C	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Apr	1.0	2.5	Perched	---	---	None	---	None
		May	1.5	2.5	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
684B: Amasa-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
684C: Amasa-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
684D: Amasa-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
686B: Annalake-----	B	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
Robago-----	C	Jan-Mar	1.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.5	>6.0	Apparent	---	---	None	---	None
		Jun	2.0	>6.0	Apparent	---	---	None	---	None
		Jul	2.5	>6.0	Apparent	---	---	None	---	None
		Aug	3.0	>6.0	Apparent	---	---	None	---	None
		Sep	2.5	>6.0	Apparent	---	---	None	---	None
		Oct	1.5	>6.0	Apparent	---	---	None	---	None
		Nov-Dec	1.0	>6.0	Apparent	---	---	None	---	None
688: Cathro-----	A/D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	Brief	Occasional
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	Brief	Frequent
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	Brief	Occasional
		Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	Brief	Frequent
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
Leafriver-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	Brief	Occasional
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	Brief	Frequent
		Jun	0.0	>6.0	Apparent	---	---	None	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	Brief	Frequent
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
689B: Chabeneau-----	B	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
689B: Channing-----	B	Jan-Mar	1.5	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.5	>6.0	Apparent	---	---	None	---	None
		Jun	2.0	>6.0	Apparent	---	---	None	---	None
		Jul	2.5	>6.0	Apparent	---	---	None	---	None
		Aug	3.0	>6.0	Apparent	---	---	None	---	None
		Sep	2.5	>6.0	Apparent	---	---	None	---	None
		Oct	1.5	>6.0	Apparent	---	---	None	---	None
		Nov-Dec	1.0	>6.0	Apparent	---	---	None	---	None
Gogebic-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
691B: Dishno-----	C	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar-May	2.0	3.8-3.8	Perched	---	---	None	---	None
		Jun-Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	3.0	3.8-3.8	Perched	---	---	None	---	None
		Oct-Nov	2.0	3.8-3.8	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Tula-----	C	Jan-Feb	5.5	>6.0	Apparent	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Mar	5.0	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.5	2.5	Perched	---	---	None	---	None
		Apr-May	4.5	>6.0	Apparent	---	---	None	---	None
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	5.5	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Oct	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	5.5	>6.0	Apparent	---	---	None	---	None
Rock outcrop.										
691D: Dishno-----	C	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar-May	2.0	3.8-3.8	Perched	---	---	None	---	None
		Jun-Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	3.0	3.8-3.8	Perched	---	---	None	---	None
		Oct-Nov	2.0	3.8-3.8	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
691D: Tula-----	C	Jan-Feb	5.5	>6.0	Apparent	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Mar	5.0	>6.0	Apparent					
		Apr-May	0.5	2.5	Perched	---	---	None	---	None
		Apr-May	4.5	>6.0	Apparent					
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Jun	4.5	>6.0	Apparent					
		Jul	5.5	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Oct	5.5	>6.0	Apparent					
		Nov	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	1.5	2.5	Perched					
		Dec	5.5	>6.0	Apparent	---	---	None	---	None
Rock outcrop.										
693B: Chabeneau-----	B	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	3.0	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
Annalake-----	B	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
694D: Annalake-----	B	Jan	5.5	>6.0	Apparent	---	---	None	---	None
		Feb	5.0	>6.0	Apparent	---	---	None	---	None
		Mar	2.5	>6.0	Apparent	---	---	None	---	None
		Apr	1.5	>6.0	Apparent	---	---	None	---	None
		May	2.0	>6.0	Apparent	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	6.0	>6.0	Apparent	---	---	None	---	None
		Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep	6.0	>6.0	Apparent	---	---	None	---	None
		Oct	5.0	>6.0	Apparent	---	---	None	---	None
		Nov	4.5	>6.0	Apparent	---	---	None	---	None
		Dec	5.0	>6.0	Apparent	---	---	None	---	None
Stutts-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
694D: Arnheim-----	D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	Long	Frequent
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	Long	Frequent
		Jun	0.5	>6.0	Apparent	---	---	None	Brief	Frequent
		Jul	1.5	>6.0	Apparent	---	---	None	---	None
		Aug	2.0	>6.0	Apparent	---	---	None	---	None
		Sep	1.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	Brief	Occasional
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
5170: Minocqua-----	B/D	Jan	2.0	>6.0	Apparent	---	---	None	---	None
		Feb	2.5	>6.0	Apparent	---	---	None	---	None
		Mar	1.0	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.0	>6.0	Apparent	0.5	Long	Frequent	---	None
		Jun	1.0	>6.0	Apparent	---	---	None	---	None
		Jul	2.0	>6.0	Apparent	---	---	None	---	None
		Aug	2.5	>6.0	Apparent	---	---	None	---	None
		Sep	1.5	>6.0	Apparent	---	---	None	---	None
		Oct	0.5	>6.0	Apparent	---	---	None	---	None
		Nov	0.0	>6.0	Apparent	---	---	None	---	None
		Dec	0.5	>6.0	Apparent	---	---	None	---	None
Pleine-----	B/D	Jan	2.0	>6.0	Apparent	---	---	None	---	None
		Feb	2.5	>6.0	Apparent	---	---	None	---	None
		Mar	1.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	1.0	>6.0	Apparent	0.0-0.5	Brief	Occasional	---	None
		Jul	2.0	>6.0	Apparent	---	---	None	---	None
		Aug	2.5	>6.0	Apparent	---	---	None	---	None
		Sep	1.5	>6.0	Apparent	---	---	None	---	None
		Oct	0.5	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Nov	0.0-6.7	>6.0	---	0.0-0.5	Brief	Frequent	---	None
		Dec	0.5	>6.0	Apparent	---	---	None	---	None
Cathro-----	A/D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
5171B: Tula-----	D	Jan-Feb	5.5	>6.0	Apparent	---	---	None	---	None
		Mar	1.5	2.5	Perched	---	---	None	---	None
		Mar	5.0	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.5	2.5	Perched	---	---	None	---	None
		Apr-May	4.5	>6.0	Apparent	---	---	None	---	None
		Jun	1.0	2.5	Perched	---	---	None	---	None
		Jun	4.5	>6.0	Apparent	---	---	None	---	None
		Jul	5.5	>6.0	Apparent	---	---	None	---	None
		Aug-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct	2.0	2.5	Perched	---	---	None	---	None
		Oct	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	5.5	>6.0	Apparent	---	---	None	---	None
		Nov	1.5	2.5	Perched	---	---	None	---	None
		Dec	5.5	>6.0	Apparent	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
5171B: Wormet-----	B	Jan-Feb	1.5	>6.0	Apparent	---	---	None	---	None
		Mar	1.0	>6.0	Apparent	---	---	None	---	None
		Apr-May	0.5	>6.0	Apparent	---	---	None	---	None
		Jun	1.0	>6.0	Apparent	---	---	None	---	None
		Jul	2.0	>6.0	Apparent	---	---	None	---	None
		Aug	3.0	>6.0	Apparent	---	---	None	---	None
		Sep	2.0	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	1.0	>6.0	Apparent	---	---	None	---	None
		Dec	1.5	>6.0	Apparent	---	---	None	---	None
Gogebic, sandy substratum-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
5172B: Gogebic, sandy substratum-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Pence-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Cathro-----	A/D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
5172C: Gogebic, sandy substratum-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Pence-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 21.--Water Features--Continued

Map symbol and soil name	Hydro- logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
5172C: Cathro-----	A/D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
5172D: Gogebic, sandy substratum-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Pence-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Cathro-----	A/D	Jan-Feb	0.0	>6.0	Apparent	---	---	None	---	None
		Mar	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Apr-May	0.0	>6.0	Apparent	0.0-0.5	Long	Frequent	---	None
		Jun	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Jul	0.5	>6.0	Apparent	---	---	None	---	None
		Aug	1.0	>6.0	Apparent	---	---	None	---	None
		Sep	0.5	>6.0	Apparent	---	---	None	---	None
		Oct-Nov	0.0	>6.0	Apparent	0.0-0.5	Brief	Frequent	---	None
		Dec	0.0	>6.0	Apparent	---	---	None	---	None
5173D: Gogebic, sandy substratum-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	---	None
		Mar	1.5	2.0	Perched	---	---	None	---	None
		Apr	1.0	2.0	Perched	---	---	None	---	None
		May	1.5	2.0	Perched	---	---	None	---	None
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	None
		Oct-Nov	1.5	2.0	Perched	---	---	None	---	None
		Dec	>6.0	>6.0	---	---	---	None	---	None
Pence-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Soil Survey of Gogebic County, Michigan

Table 22.--Classification of the Soils

Soil name	Family or higher taxonomic class
Allendale-----	Sandy over clayey, mixed, semiactive, frigid Alfic Epiaquods
Amasa-----	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, frigid Typic Haplorthods
Amnicon-----	Very-fine, mixed, active, frigid Oxyaquic Vertic Glossudalfs
Annalake-----	Coarse-loamy, mixed, superactive, frigid Alfic Oxyaquic Haplorthods
Aquents-----	Aquents
Arcadian-----	Loamy-skeletal, mixed, active, frigid Lithic Haplorthods
Argonne-----	Coarse-loamy, mixed, superactive, frigid Alfic Oxyaquic Fragiorthods
Arnheim-----	Coarse-loamy, mixed, superactive, nonacid, frigid Typic Fluvaquents
Ausable-----	Sandy, mixed, frigid Histic Humaquepts
Beechwood-----	Coarse-loamy, mixed, active, frigid Aquic Dystrudepts
Belding-----	Coarse-loamy, mixed, superactive, frigid Alfic Epiaquods
Bergland-----	Very-fine, mixed, semiactive, frigid Aeris Vertic Epiaqualfs
Beseman-----	Loamy, mixed, dysic, frigid Terric Haplosaprists
Big Iron-----	Fine-loamy, mixed, superactive, frigid Aquic Glossudalfs
Bowstring-----	Euic, frigid Fluvaquentic Haplosaprists
Cathro-----	Loamy, mixed, euic, frigid Terric Haplosaprists
Chabeneau-----	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, frigid Oxyaquic Haplorthods
Channing-----	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, frigid Typic Endoaquods
Croswell-----	Sandy, mixed, frigid Oxyaquic Haplorthods
Cuttre-----	Very-fine, mixed, active, frigid Aeris Glossaqualfs
Dawson-----	Sandy or sandy-skeletal, mixed, dysic, frigid Terric Haplosaprists
Dishno-----	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, frigid Oxyaquic Haplorthods
Dorval-----	Clayey, mixed, euic, frigid Terric Haplosaprists
Ewart-----	Sandy, mixed, frigid Fluvaquentic Endoaquolls
Fence-----	Coarse-silty, mixed, superactive, frigid Alfic Oxyaquic Haplorthods
Flintsteel-----	Fine-loamy, mixed, superactive, frigid Oxyaquic Glossudalfs
Foxpaw-----	Coarse-loamy, isotic, frigid Typic Endoaquods
Froberg-----	Clayey over loamy, mixed, semiactive, frigid Oxyaquic Vertic Hapludalfs
Gay-----	Coarse-loamy, mixed, active, nonacid, frigid Aeris Endoaquepts
Gogebic-----	Coarse-loamy, isotic, frigid Alfic Oxyaquic Fragiorthods
Greenwood-----	Dysic, frigid Typic Haplohemists
Gull Point-----	Fine-loamy, mixed, superactive, frigid Typic Argiaquolls
Histosols-----	Histosols
Islandlake-----	Sandy, mixed, frigid Lamellic Haplorthods
Kalkaska-----	Sandy, isotic, frigid Typic Haplorthods
Karlin-----	Sandy, mixed, frigid Entic Haplorthods
Kellogg-----	Sandy over clayey, mixed, active, frigid Alfic Oxyaquic Haplorthods
Keweenaw-----	Sandy, mixed, frigid Alfic Haplorthods
Kinross-----	Sandy, mixed, frigid Typic Endoaquods
Leafriver-----	Sandy, mixed, frigid Histic Humaquepts
Lode-----	Coarse-loamy, mixed, active, frigid Entic Haplorthods
Loggerhead-----	Coarse-loamy, mixed, superactive, frigid Alfic Oxyaquic Haplorthods
Loxley-----	Dysic, frigid Typic Haplosaprists
Lupton-----	Euic, frigid Typic Haplosaprists
Manido-----	Sandy, isotic, frigid Lamellic Oxyaquic Haplorthods
Manitowish-----	Sandy, mixed, frigid Oxyaquic Haplorthods
Matchwood-----	Very-fine, mixed, active, frigid Aeris Vertic Epiaqualfs
McMillan-----	Sandy, mixed, frigid Lamellic Haplorthods
Michigamme-----	Coarse-loamy, mixed, superactive, frigid Fragic Haplorthods
Minocqua-----	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid, frigid Typic Endoaquepts
Miskoaki-----	Very-fine, mixed, active, frigid Vertic Glossudalfs
Monico-----	Coarse-loamy, mixed, superactive, frigid Typic Endoaquods
Moodig-----	Coarse-loamy, mixed, superactive, frigid Alfic Epiaquods
Moquah-----	Coarse-loamy, mixed, superactive, nonacid, frigid Typic Udifluvents
Net-----	Coarse-loamy, mixed, superactive, frigid Typic Fragiaquods
Nonesuch-----	Loamy-skeletal, isotic, frigid Alfic Oxyaquic Fragiorthods
Noseum-----	Sandy, isotic, frigid Oxyaquic Haplorthods

Soil Survey of Gogebic County, Michigan

Table 22.--Classification of the Soils--Continued

Soil name	Family or higher taxonomic class
Oldman-----	Loamy-skeletal, mixed, active, frigid Oxyaquic Fragiorthods
Payseor-----	Clayey over loamy, mixed, active, frigid Aquic Hapludalfs
Pelissier-----	Sandy-skeletal, mixed, frigid Entic Haplorthods
Pelkie-----	Mixed, frigid Oxyaquic Udipsamments
Pence-----	Sandy, isotic, frigid Typic Haplorthods
Peshekee-----	Loamy, mixed, semiactive, frigid Lithic Haplorthods
Pleine-----	Coarse-loamy, mixed, superactive, nonacid, frigid Histic Humaquepts
Porkies-----	Loamy-skeletal, isotic, frigid Fragic Haplorthods
Richter-----	Coarse-loamy, mixed, semiactive, frigid Argic Endoaquods
Robago-----	Coarse-loamy, mixed, superactive, frigid Argic Endoaquods
Rockland-----	Fine-loamy, mixed, active, frigid Typic Eutrudepts
Sarona-----	Coarse-loamy, isotic, frigid Alfic Haplorthods
Sarwet-----	Coarse-loamy, mixed, superactive, frigid Alfic Oxyaquic Haplorthods
Schaat Creek-----	Fine, mixed, active, frigid Aeris Epiaqualfs
Schweitzer-----	Coarse-loamy, mixed, superactive, frigid Alfic Fragiorthods
Siskiwit-----	Sandy, mixed, frigid Alfic Oxyaquic Haplorthods
Sporley-----	Coarse-silty, mixed, active, frigid Alfic Haplorthods
Stambaugh-----	Coarse-silty over sandy or sandy-skeletal, mixed, superactive, frigid Alfic Haplorthods
Stutts-----	Sandy, isotic, frigid Typic Haplorthods
Tawas-----	Sandy or sandy-skeletal, mixed, euic, frigid Terric Haplosaprists
Tonkey-----	Coarse-loamy, mixed, semiactive, nonacid, frigid Aeris Endoaquepts
Trap Falls-----	Fine-loamy, mixed, active, nonacid, frigid Aeris Epiaquepts
Tula-----	Coarse-loamy, mixed, superactive, frigid Argic Fragiaquods
Ubyl-----	Coarse-loamy, mixed, semiactive, frigid Alfic Haplorthods
Vilas-----	Sandy, isotic, frigid Entic Haplorthods
Wabeno-----	Coarse-loamy, mixed, superactive, frigid Alfic Oxyaquic Fragiorthods
Wainola-----	Sandy, mixed, frigid Typic Endoaquods
Waiska-----	Sandy-skeletal, mixed, frigid Typic Haplorthods
Wakefield-----	Coarse-loamy, isotic, frigid Alfic Oxyaquic Fragiorthods
Witbeck-----	Coarse-loamy, mixed, semiactive, nonacid, frigid Histic Humaquepts
Wormet-----	Sandy, mixed, frigid Typic Endoaquods
Zandi-----	Coarse-loamy, isotic, frigid Lamellic Haplorthods

Interpretive Groups

Soil Survey of Gogebic County, Michigan

Interpretive Groups

(Unless otherwise indicated, a complex is treated as a single management unit in the Land capability classification column. See text for definitions of the groups. Absence of an entry indicates that the map unit is not suited to the intended use or that an interpretive group is not assigned)

Map symbol and soil name	Land capability classification	Michigan soil management group	Important farmland category	Hydric soil status	Habitat type (primary/ secondary)
7----- Histosols----- Aquents-----	8w	None assigned None assigned	Not prime farmland	Hydric Hydric	None assigned None assigned
10----- Witbeck	5w	3c	Not prime farmland	Hydric	TTS
12A----- Monico	2e	3b-a	Farmland of local importance	Not hydric	TMC-D
13B----- Argonne	2e	3a	Farmland of local importance	Not hydric	ATD
13C----- Argonne	4e	3a	Not prime farmland	Not hydric	ATD
13D----- Argonne	7e	3a	Not prime farmland	Not hydric	ATD
15B----- Wabeno	2e	3a-af	Farmland of local importance	Not hydric	AVO
15C----- Wabeno	4e	3a-af	Not prime farmland	Not hydric	AVO
16A----- Pence	2s	3a	Farmland of local importance	Not hydric	AVO
17B----- Lode	3s	3/5a-a	Not prime farmland	Not hydric	TM
17C----- Lode	4e	3/5a-a	Not prime farmland	Not hydric	TM
20B----- Pence----- Lode-----	3s	4a-a 3/5a-a	Not prime farmland	Not hydric Not hydric	TMV TM
20C----- Pence	6e	4a-a	Not prime farmland	Not hydric	TMV
21----- Minocqua----- Leafriver-----	6w	4c 5c	Not prime farmland	Hydric Hydric	TMC TTS
23B----- Chabeneau----- Karlin----- Pence-----	6s	3/5a 4a 4a	Farmland of local importance	Not hydric Not hydric Not hydric	TM ATD/TMV TMV/AQU
26B----- Stambaugh	3s	3/5a-a	Farmland of local importance	Not hydric	ATD/AVO

Soil Survey of Gogebic County, Michigan

Interpretive Groups--Continued

Map symbol and soil name	Land capability classification	Michigan soil management group	Important farmland category	Hydric soil status	Habitat type (primary/ secondary)
27----- Lupton----- Tawas-----	6w	Mc M/4c	Not prime farmland	Hydric Hydric	TTS TTS
28----- Dawson----- Greenwood----- Loxley-----	7w	Mc-a Mc-a M/4c-a	Not prime farmland	Hydric Hydric Hydric	PCS PCS PCS
29B----- Pence, very deep water table	3s	4a	Not prime farmland	Not hydric	TMV/TM
31----- Evart----- Tawas-----	7w	L-4c M/4c	Not prime farmland	Hydric Hydric	FMC-C FMC-C
32A----- Net	7s	3b-af	Not prime farmland	Not hydric	TMC/ATD
35A----- Beechwood	2e	3b-a	Farmland of local importance	Not hydric	TMC-D/TMC
36----- Gay----- Pleine-----	5w	3c 3c	Not prime farmland	Hydric Hydric	FI FI/FI-C
37B----- Gogebic----- Tula----- Lupton-----	2e	 3a-af 3b-af Mc	Farmland of local importance	 Not hydric Not hydric Hydric	 TMC-D TMC TTS/TTM
38B----- Gogebic, sandy substratum	4e	3a-af	Not prime farmland	Not hydric	ATD/AVO
38C----- Gogebic, sandy substratum	6e	3a-af	Not prime farmland	Not hydric	ATD/AVO
38D----- Gogebic, sandy substratum	7e	3a-af	Not prime farmland	Not hydric	ATD/AVO
39B----- Gogebic, sandy substratum	4e	3a-af	Not prime farmland	Not hydric	AVO/ATD
39C----- Gogebic, sandy substratum	6e	3a-af	Not prime farmland	Not hydric	AVO/ATD
39D----- Gogebic, sandy substratum	7e	3a-af	Not prime farmland	Not hydric	AVO/ATD
41----- Lupton----- Pleine----- Cathro-----	6w	Mc 3c M/3c	Not prime farmland	Hydric Hydric Hydric	TTS/TTM TTS/FI TTS/FI

Soil Survey of Gogebic County, Michigan

Interpretive Groups--Continued

Map symbol and soil name	Land capability classification	Michigan soil management group	Important farmland category	Hydric soil status	Habitat type (primary/ secondary)
42----- Ausable----- Tawas-----	7w	L-4c M/4c	Not prime farmland	Hydric Hydric	FMC-C FMC-C
43B----- Karlin----- Pence-----	3s	4a 4a-a	Not prime farmland	Not hydric Not hydric	TM/ATD TM
43C----- Karlin----- Pence-----	4e	4a 4a-a	Not prime farmland	Not hydric Not hydric	TM/ATD TM
43D----- Karlin----- Pence-----	7e	4a 4a-a	Not prime farmland	Not hydric Not hydric	TM/ATD TM
44B----- Karlin----- Keweenaw----- Sarona, dense substratum	3s	4a 4a-a 3a	Not prime farmland	Not hydric Not hydric Not hydric	ATD/TM ATD/TM ATD/TM
44C----- Karlin----- Keweenaw----- Sarona, dense substratum	6e	4a 4a-a 3a	Not prime farmland	Not hydric Not hydric Not hydric	ATD/TM ATD/TM ATD/TM
44D----- Karlin----- Keweenaw----- Sarona, dense substratum	7e	4a 4a-a 3a	Not prime farmland	Not hydric Not hydric Not hydric	ATD/TM ATD/TM ATD/TM
46C----- Amasa----- Karlin-----	4e	3/5a-a 4a	Not prime farmland	Not hydric Not hydric	ATD ATD/TM
46D----- Amasa----- Karlin-----	7e	3/5a-a 4a	Not prime farmland	Not hydric Not hydric	ATD ATD/TM
46E----- Amasa----- Karlin-----	7e	3/5a-a 4a	Not prime farmland	Not hydric Not hydric	ATD ATD/TM
46F----- Amasa----- Karlin-----	7e	3/5a-a 4a	Not prime farmland	Not hydric Not hydric	ATD ATD/TM
47B----- Karlin, very deep water table----- Noseum----- Gay-----	3s	4a 4a 3c	Not prime farmland	Not hydric Not hydric Hydric	ATD/TM TMC-V TMC
48C----- Karlin----- Michigamme-----	4e	4a 3/Ra	Not prime farmland	Not hydric Not hydric	ATD ATD/AVO
48F----- Karlin----- Michigamme-----	7e	4a 3/Ra	Not prime farmland	Not hydric Not hydric	ATD ATD/AVO

Soil Survey of Gogebic County, Michigan

Interpretive Groups--Continued

Map symbol and soil name	Land capability classification	Michigan soil management group	Important farmland category	Hydric soil status	Habitat type (primary/ secondary)
49B----- Pelissier----- Sarwet-----	4s	Ga 3a	Not prime farmland	Not hydric Not hydric	ATD ATD
49C----- Pelissier----- Sarwet-----	6s	Ga 3a	Not prime farmland	Not hydric Not hydric	ATD ATD
49D----- Pelissier	7s	Ga	Not prime farmland	Not hydric	ATD
52B----- Pence----- Vilas-----	3s	4a 4a	Not prime farmland	Not hydric Not hydric	AQV/TMV AQV
52C----- Pence----- Vilas-----	4e	4a 4a	Not prime farmland	Not hydric Not hydric	AQV/TMV AQV
53B----- Manitowish----- Croswell-----	2e		Farmland of local importance	Not hydric Not hydric	TMV/TMC TMV
57B----- Karlin----- Manitowish-----	3s	4a 4a	Not prime farmland	Not hydric Not hydric	TMV TMV/TMC
57C----- Karlin----- Manitowish-----	4e	4a 4a	Not prime farmland	Not hydric Not hydric	TMV TMV/TMC
58B----- Vilas, very deep water table----- Croswell----- Pence, very deep water table-----	4s	4a 5a 4a	Not prime farmland	Not hydric Not hydric Not hydric	TMV/AQV TMV TMV/AQV
61----- Tawas----- Kinross-----	6w	M/4c 5c-a	Not prime farmland	Hydric Hydric	TTS TTS/TMC
62B----- Pelkie	6s	L-2c	Farmland of local importance	Not hydric	AVO/ATD
83----- Bowstring	7w	L-Mc	Not prime farmland	Hydric	FMC-C/FMC
141D----- Oldman	6s	Ga-f	Not prime farmland	Not hydric	ATD/AVO
141E----- Oldman	7e	Ga-f	Not prime farmland	Not hydric	ATD/AVO
141F----- Porkies	7s	Ga-f	Not prime farmland	Not hydric	ATD/AVO
214B----- Amnicon----- Bergland-----	2e	0a 0c	Farmland of local importance	Not hydric Hydric	TAM FMC/TTM

Soil Survey of Gogebic County, Michigan

Interpretive Groups--Continued

Map symbol and soil name	Land capability classification	Michigan soil management group	Important farmland category	Hydric soil status	Habitat type (primary/ secondary)
216B----- Amnicon	2e	0a	Farmland of local importance	Not hydric	TAM/TTP
217A----- Cuttre	3w	0b	Farmland of local importance	Not hydric	TTP/TAM-Eq
218----- Bergland	5w	0c	Not prime farmland	Hydric	FE/TTM
219B----- Payseor----- Froberg-----	3w	0b 1a	Not prime farmland	Not hydric Not hydric	TTP/TAM-Eq TAM
222----- Matchwood	5w	1c	Not prime farmland	Hydric	FE/TTM
225A----- Cuttre----- Bergland-----	3w	0b 0c	Farmland of local importance	Not hydric Hydric	TTP/TAM-Eq FE/TTM
226B----- Froberg	3e	1a	Not prime farmland	Not hydric	TAM
230B----- Moquah----- Arnheim-----	5w	L-2a L-2c	Not prime farmland	Not hydric Hydric	AOC/AVO FMC/FI
231----- Matchwood----- Dorval-----	5w	1c M/1c	Not prime farmland	Hydric Hydric	TMC/FMC TTS/FMC
233----- Schaat Creek	6w	1.5c	Not prime farmland	Hydric	FMC-C
239D----- Miskoaki	4e	0a	Not prime farmland	Not hydric	TAM/TM
277B----- Kellogg, sandy substratum----- Allendale-----	3s	4/1a 4/1b	Not prime farmland	Not hydric Not hydric	ATD TMC-D/TMC
280B----- Flintsteel	2e	2.5a	Prime farmland	Not hydric	TAM/AVO
280C----- Flintsteel	3e	2.5a	Not prime farmland	Not hydric	TAM/AVO
282B----- Big Iron----- Flintsteel-----	2w	1.5b 2.5a	Farmland of local importance	Not hydric Not hydric	TTP TAM/AVO
283B----- Loggerhead----- Noseum----- Ubyly-----	2s	3/2a 4a 3/2a	Farmland of local importance	Not hydric Not hydric Not hydric	ATD/AVO ATD/TM ATD/AVO

Soil Survey of Gogebic County, Michigan

Interpretive Groups--Continued

Map symbol and soil name	Land capability classification	Michigan soil management group	Important farmland category	Hydric soil status	Habitat type (primary/ secondary)
283C----- Loggerhead----- Noseum----- Ubly-----	3e	3/2a 4a 3/2a	Not prime farmland	Not hydric Not hydric Not hydric	ATD/AVO ATD/TM ATD/AVO
284----- Aguents----- Gull Point-----	8w	None assigned L-2c	Not prime farmland	Hydric Hydric	FMC-C FMC/FI
285F----- Rockland----- Arnheim-----	7e	2.5a L-2c	Not prime farmland	Not hydric Hydric	ATD/AVO FMC/FI
286A----- Big Iron----- Belding-----	2w	 1.5b 3/2b	Farmland of local importance	 Not hydric Not hydric	 TTP TMC-D/AVO-CI
287----- Trap Falls----- Tonkey-----	5w	3c 3c-s	Not prime farmland	Hydric Hydric	FE FI
289B----- Amasa	3s	3/5a-a	Not prime farmland	Not hydric	AVO
290B----- Flintsteel	2e	2.5a	Prime farmland	Not hydric	AVO/TAM
290C----- Flintsteel	2e	2.5a	Farmland of local importance	Not hydric	AVO/TAM
291B----- Kalkaska	4s	5a	Not prime farmland	Not hydric	ATD-D/TM
291D----- Kalkaska	6s	5a	Not prime farmland	Not hydric	ATD-D/TM
292B----- Manido----- Richter-----	4s	5a 3b-s	Not prime farmland	Not hydric Not hydric	ATD TMC
293A----- Wainola----- Trap Falls-----	3w	4b 2.5c	Not prime farmland	Not hydric Hydric	TMC FI/FMC
296B----- Manido----- Fence----- Gogebic, sandy substratum-----	4s	5a 3a 3a-af	Not prime farmland	Not hydric Not hydric Not hydric	TMC-D ATD ATD/AVO
296D----- Manido----- Sporley----- Gogebic, sandy substratum-----	7s	5a 2.5a 3a-af	Not prime farmland	Not hydric Not hydric Not hydric	TMC-D ATD/AVO ATD/AVO
299B----- Zandi----- Amasa----- Flintsteel-----	2e	3a-s 3/5a-a 2.5a	Not prime farmland	Not hydric Not hydric Not hydric	TM AVO TAM/AVO

Soil Survey of Gogebic County, Michigan

Interpretive Groups--Continued

Map symbol and soil name	Land capability classification	Michigan soil management group	Important farmland category	Hydric soil status	Habitat type (primary/ secondary)
299C----- Zandi----- Amasa----- Flintsteel-----	4e	3a-s 3/5a-a 2.5a	Not prime farmland	Not hydric Not hydric Not hydric	TM AVO TAM/AVO
301A----- Moodig	2e	3b	Farmland of local importance	Not hydric	AVO-CI
302B----- Manitowish	2e	4a	Farmland of local importance	Not hydric	TMC-D
302C----- Manitowish	4e	4a	Not prime farmland	Not hydric	TMC-D
303----- Bowstring----- Arnheim-----	7w	L-Mc L-2c	Not prime farmland	Hydric Hydric	FMC-C/FMC FMC-C/FMC
305B----- Keweenaw----- Siskiwit-----	2e	4a-a 4a-a	Farmland of local importance	Not hydric Not hydric	TM/TMV TMC-V
305C----- Keweenaw----- Siskiwit-----	4e	4a-a 4a-a	Not prime farmland	Not hydric Not hydric	TM/TMV TMC-V
307----- Lupton----- Cathro-----	6w	Mc M/3c	Not prime farmland	Hydric Hydric	TTS/TTM TTS/PO
309----- Cathro	6w	M/3c	Not prime farmland	Hydric	TTS/FI
310B----- Gogebic	4e	3a-af	Not prime farmland	Not hydric	ATD/AVO
310C----- Gogebic	6e	3a-af	Not prime farmland	Not hydric	ATD/AVO
310D----- Gogebic	7e	3a-af	Not prime farmland	Not hydric	ATD/AVO
310E----- Schweitzer	7s	3a-af	Not prime farmland	Not hydric	ATD/AVO
311B----- Tula----- Gogebic-----	2w	3b-af 3a-af	Farmland of local importance	Not hydric Not hydric	ATD-CI/TMC-D ATD/AVO
312A----- Tula----- Foxpaw----- Gay-----	4w	3b-af 3c 3c	Not prime farmland	Not hydric Hydric Hydric	TMC-D/ATD-CI TMC/FI TMC/FI
316----- Gay	5w	3c	Not prime farmland	Hydric	FI
317B----- Gogebic	4e	3a-af	Not prime farmland	Not hydric	AVO/ATD

Soil Survey of Gogebic County, Michigan

Interpretive Groups--Continued

Map symbol and soil name	Land capability classification	Michigan soil management group	Important farmland category	Hydric soil status	Habitat type (primary/ secondary)
317C----- Gogebic	6e	3a-af	Not prime farmland	Not hydric	AVO/ATD
317D----- Gogebic	7e	3a-af	Not prime farmland	Not hydric	AVO/ATD
319B----- McMillan----- Noseum-----	2e		Farmland of local importance	Not hydric Not hydric	ATD ATD/TM
319C----- McMillan----- Islandlake-----	4e	3a 5a	Not prime farmland	Not hydric Not hydric	ATD ATD/TM
319D----- McMillan----- Islandlake-----	7e	3a 5a	Not prime farmland	Not hydric Not hydric	ATD ATD/TM
319E----- McMillan----- Islandlake-----	7e	3a 5a	Not prime farmland	Not hydric Not hydric	ATD ATD/TM
322B----- Stutts----- Keweenaw-----	3s	4a 4a-a	Not prime farmland	Not hydric Not hydric	TM TM/TMV
322C----- Stutts----- Keweenaw-----	4e	4a 4a-a	Not prime farmland	Not hydric Not hydric	TM TM/TMV
322D----- Stutts----- Keweenaw-----	7e	4a 4a-a	Not prime farmland	Not hydric Not hydric	TM TM/TMV
323B----- Keweenaw----- Kalkaska-----	2e	4a-a 5a	Farmland of local importance	Not hydric Not hydric	ATD/TM ATD-D/TM
323C----- Keweenaw----- Kalkaska-----	4e	4a-a 5a	Not prime farmland	Not hydric Not hydric	ATD/TM ATD-D/TM
323D----- Keweenaw----- Kalkaska-----	7e	4a-a 5a	Not prime farmland	Not hydric Not hydric	ATD/TM ATD-D/TM
325B----- Siskiwit----- Gogebic-----	2e	4b 3a-af	Not prime farmland	Not hydric Not hydric	AVO AVO/ATD
325C----- Siskiwit----- Gogebic-----	4e	4b 3a-af	Not prime farmland	Not hydric Not hydric	AVO AVO/ATD
327----- Foxpaw----- Sarwet-----	5w	3c 3a	Not prime farmland	Hydric Not hydric	TMC/FI TMC-D

Soil Survey of Gogebic County, Michigan

Interpretive Groups--Continued

Map symbol and soil name	Land capability classification	Michigan soil management group	Important farmland category	Hydric soil status	Habitat type (primary/ secondary)
328B----- Annalake----- Karlin-----	2e	3a-s 4a	Farmland of local importance	Not hydric Not hydric	AVO/ATD AVO
328C----- Annalake----- Karlin-----	3e	3a-s 4a	Not prime farmland	Not hydric Not hydric	AVO/ATD AVO
328D----- Karlin----- Zandi-----	7e	4a 3a-s	Not prime farmland	Not hydric Not hydric	AVO ATD/TM
329A----- Tula	2w	3b-af	Farmland of local importance	Not hydric	AVO-CI/TMC-D
351B----- Gogebic	6s	3a-af	Not prime farmland	Not hydric	AVO/ATD
351C----- Gogebic	6s	3a-af	Not prime farmland	Not hydric	AVO/ATD
351D----- Gogebic	7e	3a-af	Not prime farmland	Not hydric	AVO/ATD
351E----- Schweitzer	7s	3a-af	Not prime farmland	Not hydric	AVO/ATD
351F----- Schweitzer	7s	3a-af	Not prime farmland	Not hydric	AVO/ATD
353A----- Tula	4w	3b-af	Not prime farmland	Not hydric	ATD-CI/TMC-D
354B----- Gogebic	6s	3a-af	Not prime farmland	Not hydric	ATD/AVO
354C----- Gogebic	6s	3a-af	Not prime farmland	Not hydric	ATD/AVO
354D----- Gogebic	7e	3a-af	Not prime farmland	Not hydric	ATD/AVO
354E----- Schweitzer	7s	3a-af	Not prime farmland	Not hydric	ATD/AVO
354F----- Schweitzer	7s	3a-af	Not prime farmland	Not hydric	ATD/AVO
363C----- Talus----- Arcadian-----	8s	None assigned Ra	Not prime farmland	Not applicable Not hydric	None assigned AVO
363D----- Talus----- Arcadian-----	8s	None assigned Ra	Not prime farmland	Not applicable Not hydric	None assigned AVO
363E----- Talus----- Arcadian-----	8s	None assigned Ra	Not prime farmland	Not applicable Not hydric	None assigned AVO

Soil Survey of Gogebic County, Michigan

Interpretive Groups--Continued

Map symbol and soil name	Land capability classification	Michigan soil management group	Important farmland category	Hydric soil status	Habitat type (primary/ secondary)
363F----- Talus----- Arcadian-----	8s	None assigned Ra	Not prime farmland	Not applicable Not hydric	None assigned AVO
364F----- Talus	8s	None assigned	Not prime farmland	Not applicable	None assigned
365F----- Rock outcrop	8s	None assigned	Not prime farmland	Not applicable	None assigned
369C----- Dishno----- Gogebic----- Peshekee----- Rock outcrop-----	6s	3a 3a-af Ra None assigned	Not prime farmland	Not hydric Not hydric Not hydric Not applicable	ATD/AVO AVO/ATD TMV None assigned
369D----- Dishno----- Gogebic----- Peshekee----- Rock outcrop-----	7e	3a 3a-af Ra None assigned	Not prime farmland	Not hydric Not hydric Not hydric Not applicable	ATD/AVO AVO/ATD TMV None assigned
369E----- Michigamme----- Schweitzer----- Peshekee----- Rock outcrop-----	7s	3/Ra 3a-af Ra None assigned	Not prime farmland	Not hydric Not hydric Not hydric Not applicable	ATD/AVO AVO/ATD TMV None assigned
369F----- Michigamme----- Schweitzer----- Peshekee----- Rock outcrop-----	7s	3/Ra 3a-af Ra None assigned	Not prime farmland	Not hydric Not hydric Not hydric Not applicable	ATD/AVO AVO/ATD TMV None assigned
370E----- Peshekee----- Rock outcrop-----	7s	Ra None assigned	Not prime farmland	Not hydric Not applicable	TMV None assigned
370F----- Peshekee----- Rock outcrop-----	7s	Ra None assigned	Not prime farmland	Not hydric Not applicable	TMV None assigned
375. Dumps and Pits, mine					
380----- Beseman----- Greenwood-----	7w	M/3c Mc-a	Not prime farmland	Hydric Hydric	PCS PCS
382----- Cathro----- Arnheim-----	7w	M/3c L-2c	Not prime farmland	Hydric Hydric	FMC-C/FI FMC-C/FI
388----- Gay----- Tula-----	5w	3c 3b-af	Not prime farmland	Hydric Not hydric	TMC TMC-D/AVO-CI
398B----- Tula----- Gay----- Wakefield-----	4w	3b-af 3c 2.5a-a	Not prime farmland	Not hydric Hydric Not hydric	TMC-D/AVO-CI TMC ATD

Soil Survey of Gogebic County, Michigan

Interpretive Groups--Continued

Map symbol and soil name	Land capability classification	Michigan soil management group	Important farmland category	Hydric soil status	Habitat type (primary/ secondary)
418----- Loxley----- Beseman-----	7w	Mc-a M/3c	Not prime farmland	Hydric Hydric	PCS PCS
419----- Pleine----- Cathro----- Gay-----	5w	3c M/3c 3c	Not prime farmland	Hydric Hydric Hydric	FI-C/FI FI-C/FI TMC
424----- Gay	5w	3c	Not prime farmland	Hydric	TMC
425----- Foxpaw----- Gay-----	5w	3c 3c	Not prime farmland	Hydric Hydric	FI/TMC TMC
428C----- Gogebic----- Michigamme-----	6s	3a-af 3/Ra	Not prime farmland	Not hydric Not hydric	AVO/ATD AVO/ATD
428D----- Gogebic----- Michigamme-----	7e	3a-af 3/Ra	Not prime farmland	Not hydric Not hydric	AVO/ATD AVO/ATD
429B----- Gogebic----- Peshekee-----	6s	3a-af Ra	Not prime farmland	Not hydric Not hydric	ATD/AVO ATD-D
429C----- Gogebic----- Peshekee-----	7e	3a-af Ra	Not prime farmland	Not hydric Not hydric	ATD/AVO ATD-D
429D----- Gogebic----- Peshekee-----	7e	3a-af Ra	Not prime farmland	Not hydric Not hydric	ATD/AVO ATD-D
429E----- Schweitzer----- Peshekee-----	7s	3a-af Ra	Not prime farmland	Not hydric Not hydric	ATD/AVO ATD-D
430B----- Stutts	3s	4a	Not prime farmland	Not hydric	ATD
430C----- Stutts	4e	4a	Not prime farmland	Not hydric	ATD
430D----- Stutts	7e	4a	Not prime farmland	Not hydric	ATD
430E----- Stutts	7e	4a	Not prime farmland	Not hydric	ATD
432C----- Gogebic----- Michigamme----- Rock outcrop-----	6s	3a-af 3/Ra None assigned	Not prime farmland	Not hydric Not hydric Not applicable	AVO/ATD ATD/AVO None assigned
432D----- Gogebic----- Michigamme----- Rock outcrop-----	7e	3a-af 3/Ra None assigned	Not prime farmland	Not hydric Not hydric Not applicable	AVO/ATD ATD/AVO None assigned

Soil Survey of Gogebic County, Michigan

Interpretive Groups--Continued

Map symbol and soil name	Land capability classification	Michigan soil management group	Important farmland category	Hydric soil status	Habitat type (primary/ secondary)
432E----- Schweitzer----- Michigamme----- Rock outcrop-----	7s	3a-af 3/Ra None assigned	Not prime farmland	Not hydric Not hydric Not applicable	AVO/ATD ATD/AVO None assigned
432F----- Schweitzer----- Michigamme----- Rock outcrop-----	7s	3a-af 3/Ra None assigned	Not prime farmland	Not hydric Not hydric Not applicable	AVO/ATD ATD/AVO None assigned
433B----- McMillan	2e	3a	Farmland of local importance	Not hydric	AVO
433C----- McMillan	4e	3a	Not prime farmland	Not hydric	AVO
433D----- McMillan	7e	3a	Not prime farmland	Not hydric	AVO
435C----- Kalkaska----- Waiska-----	6s	5a Ga	Not prime farmland	Not hydric Not hydric	ATD/TM AVO
435D----- Kalkaska----- Waiska-----	7s	5a Ga	Not prime farmland	Not hydric Not hydric	ATD/TM AVO
435E----- Kalkaska----- Waiska-----	7s	5a Ga	Not prime farmland	Not hydric Not hydric	ATD/TM AVO
437B----- Manitowish----- Channing-----	2e	4a 3/5b	Not prime farmland	Not hydric Not hydric	ATD ATD-CI
448F----- Rockland----- Rock outcrop-----	7e	2.5a None assigned	Not prime farmland	Not hydric Not applicable	AVO/AOC None assigned
449C----- Flintsteel----- Minocqua-----	3e	2.5a 4c	Not prime farmland	Not hydric Hydric	AVO FI
452F----- Rockland	7e	2.5a	Not prime farmland	Not hydric	AVO/AOC
460B----- Belding----- Manido-----	2e	3/2b 5a	Farmland of local importance	Not hydric Not hydric	TMC-D/AVO-CI TMC-D
461B----- Loggerhead	2s	3/2a	Farmland of local importance	Not hydric	ATD/AVO
462C----- Nonesuch----- Rock outcrop-----	4s	2.5a None assigned	Not prime farmland	Not hydric Not applicable	AVO/ATD None assigned
509----- Cathro----- Minocqua-----	6w	M/3c 4c	Not prime farmland	Hydric Hydric	FI-C/FI FI-C

Soil Survey of Gogebic County, Michigan

Interpretive Groups--Continued

Map symbol and soil name	Land capability classification	Michigan soil management group	Important farmland category	Hydric soil status	Habitat type (primary/ secondary)
511A----- Gogebic----- Tula----- Chabeneau-----	3s	3a-af 3b-af 3/5a	Not prime farmland	Not hydric Not hydric Not hydric	AVO/ATD AVO-CI AVO
519B----- Gogebic----- Karlin-----	4e	3a-af 4a	Not prime farmland	Not hydric Not hydric	ATD/AVO ATD/AVO
519C----- Gogebic----- Karlin-----	6e	3a-af 4a	Not prime farmland	Not hydric Not hydric	ATD/AVO ATD/AVO
519D----- Gogebic----- Karlin-----	7e	3a-af 4a	Not prime farmland	Not hydric Not hydric	ATD/AVO ATD/AVO
522. Pits, sand and gravel					
523D----- Gogebic, sandy substratum----- Karlin-----	7e	3a-af 4a	Not prime farmland	Not hydric Not hydric	ATD/AVO ATD/AVO
524C----- Waiska----- Amasa-----	6s	Ga 3/5a-a	Not prime farmland	Not hydric Not hydric	ATD ATD
524D----- Waiska----- Amasa-----	7s	Ga 3/5a-a	Not prime farmland	Not hydric Not hydric	ATD ATD
524E----- Waiska----- Amasa-----	7s	Ga 3/5a-a	Not prime farmland	Not hydric Not hydric	ATD ATD
527B----- Wakefield	4e	2.5a-a	Not prime farmland	Not hydric	ATD/AVO
527C----- Wakefield	6e	2.5a-a	Not prime farmland	Not hydric	ATD
527D----- Wakefield	7e	2.5a-a	Not prime farmland	Not hydric	ATD
528B----- Gogebic----- Annalake-----	2e	3a-af 3a-s	Farmland of local importance	Not hydric Not hydric	AVO/ATD AVO
528C----- Gogebic----- Annalake-----	4e	3a-af 3a-s	Not prime farmland	Not hydric Not hydric	AVO/ATD AVO
528D----- Gogebic----- Annalake-----	7e	3a-af 3a-s	Not prime farmland	Not hydric Not hydric	AVO/ATD AVO
551B----- Gogebic----- Dishno-----	6s	3a-af 3a	Not prime farmland	Not hydric Not hydric	AVO/ATD ATD/AVO

Soil Survey of Gogebic County, Michigan

Interpretive Groups--Continued

Map symbol and soil name	Land capability classification	Michigan soil management group	Important farmland category	Hydric soil status	Habitat type (primary/ secondary)
566----- Beach, rubbly	7s	None assigned	Not prime farmland	Not hydric	None assigned
576B----- Flintsteel----- Loggerhead-----	2e	2.5a 3/2a	Farmland of local importance	Not hydric Not hydric	TAM/AVO ATD/AVO
576C----- Flintsteel----- Loggerhead-----	3e	2.5a 3/2a	Not prime farmland	Not hydric Not hydric	TAM/AVO ATD/AVO
576D----- Flintsteel----- Loggerhead-----	7e	2.5a 3/2a	Not prime farmland	Not hydric Not hydric	TAM/AVO ATD/AVO
577B----- Loggerhead----- Chabeneau----- Arcadian-----	2s	3/2a 3/5a Ra	Not prime farmland	Not hydric Not hydric Not hydric	ATD/AVO TMC-V AVO
577C----- Loggerhead----- Chabeneau----- Arcadian-----	3e	3/2a 3/5a Ra	Not prime farmland	Not hydric Not hydric Not hydric	ATD/AVO TMC-V AVO
577D----- Loggerhead----- Chabeneau----- Arcadian-----	4e	3/2a 3/5a Ra	Not prime farmland	Not hydric Not hydric Not hydric	ATD/AVO TMC-V AVO
578D----- Arcadian----- Keweenaw-----	7s	Ra 4a-a	Not prime farmland	Not hydric Not hydric	AVO ATD-D/TM
625B----- Fence	2e	3a	Farmland of local importance	Not hydric	ATD
625C----- Fence	4e	3a	Not prime farmland	Not hydric	ATD
626D----- Sporley	7e	2.5a	Not prime farmland	Not hydric	ATD/AVO
626E----- Sporley	7e	2.5a	Not prime farmland	Not hydric	ATD/AVO
648B----- Annalake	2e	3a-s	Farmland of local importance	Not hydric	AVO
648C----- Annalake	4e	3a-s	Not prime farmland	Not hydric	AVO
650----- Leafriver	6w	5c	Not prime farmland	Hydric	FI
652B----- Manido----- Annalake-----	4s	5a 3a-s	Not prime farmland	Not hydric Not hydric	TMC-D ATD

Soil Survey of Gogebic County, Michigan

Interpretive Groups--Continued

Map symbol and soil name	Land capability classification	Michigan soil management group	Important farmland category	Hydric soil status	Habitat type (primary/ secondary)
656B----- Stutts----- Zandi-----	3s	4a 3a-s	Not prime farmland	Not hydric Not hydric	ATD/TM ATD/TM
656C----- Stutts----- Zandi-----	4e	4a 3a-s	Not prime farmland	Not hydric Not hydric	ATD/TM ATD/TM
656D----- Stutts----- Zandi-----	7e	4a 3a-s	Not prime farmland	Not hydric Not hydric	ATD/TM ATD/TM
680B----- Tonkey----- Pleine----- Annalake-----	5w	3c-s 3c 3a-s	Not prime farmland	Hydric Hydric Not hydric	TMC/FI FI ATD
681----- Cathro----- Tonkey-----	6w	M/3c 3c-s	Not prime farmland	Hydric Hydric	TTM/FI TMC/FI
683B----- Amasa----- Oldman-----	3s	3/5a-a Ga-f	Not prime farmland	Not hydric Not hydric	AVO AVO/ATD
683C----- Amasa----- Oldman-----	6s	3/5a-a Ga-f	Not prime farmland	Not hydric Not hydric	AVO AVO/ATD
683D----- Amasa----- Oldman-----	7s	3/5a-a Ga-f	Not prime farmland	Not hydric Not hydric	AVO AVO/ATD
684B----- Amasa	2e	3/5a-a	Not prime farmland	Not hydric	ATD
684C----- Amasa	3e	3/5a-a	Not prime farmland	Not hydric	ATD
684D----- Amasa	7e	3/5a-a	Not prime farmland	Not hydric	ATD
686B----- Annalake----- Robago-----	2e	3a-s 3b-s	Farmland of local importance	Not hydric Not hydric	ATD TMC-D
688----- Cathro----- Leafriver-----	6w	M/3c 5c	Not prime farmland	Hydric Hydric	FI-C/FI FI
689B----- Chabeneau----- Channing----- Gogebic-----	6s	3/5a 3/5b 3a-af	Not prime farmland	Not hydric Not hydric Not hydric	ATD ATD-CI AVO
691B----- Dishno----- Tula----- Rock outcrop-----	3s	3a 3b-af None assigned	Not prime farmland	Not hydric Not hydric Not applicable	ATD/AVO TMC-D/AVO-CI None assigned

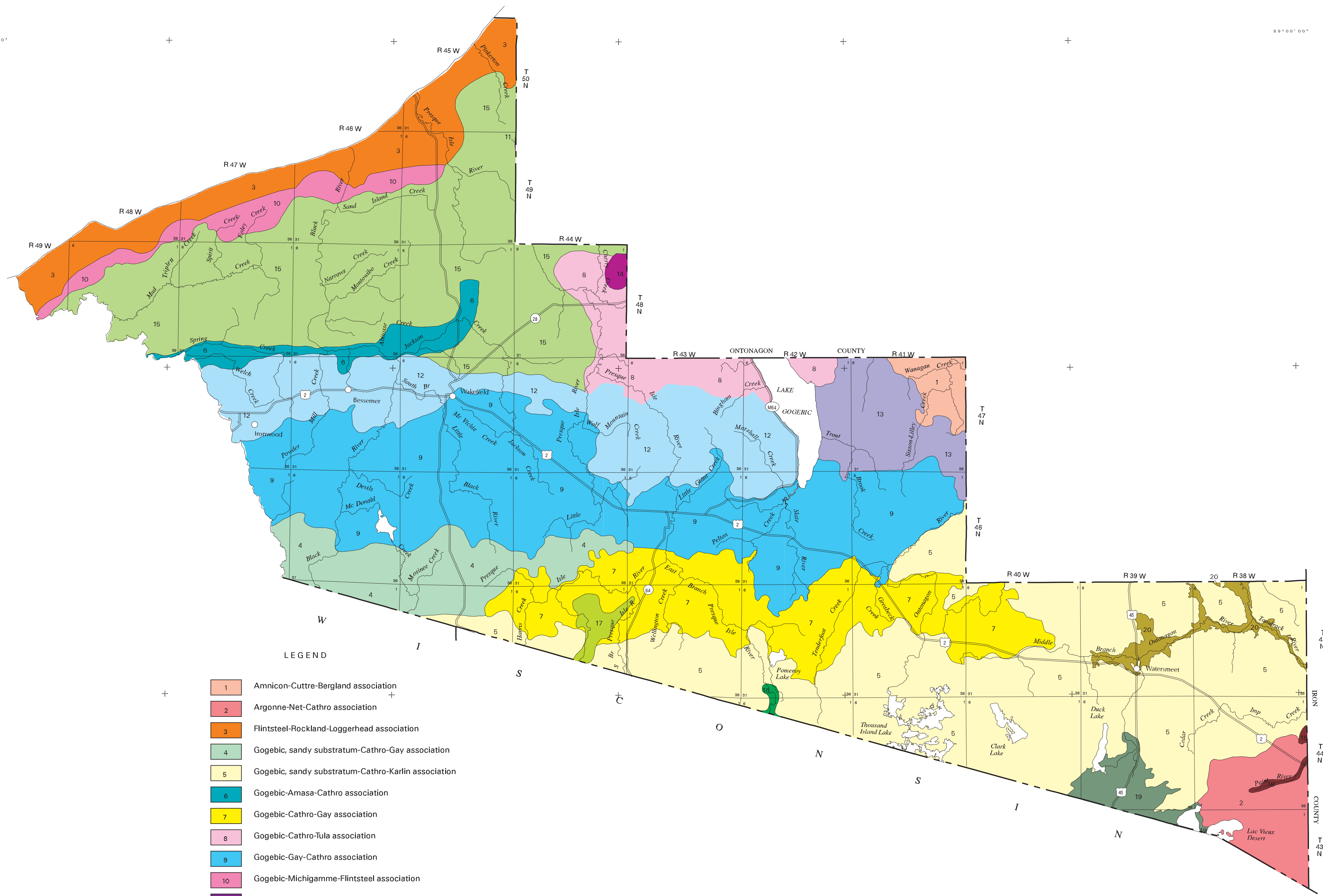
Soil Survey of Gogebic County, Michigan

Interpretive Groups--Continued

Map symbol and soil name	Land capability classification	Michigan soil management group	Important farmland category	Hydric soil status	Habitat type (primary/ secondary)
691D----- Dishno----- Tula----- Rock outcrop-----	7s	3a 3b-af None assigned	Not prime farmland	Not hydric Not hydric Not applicable	ATD/AVO TMC-D/AVO-CI None assigned
693B----- Chabeneau----- Annalake-----	2e	3/5a 3a-s	Farmland of local importance	Not hydric Not hydric	AVO ATD
694D----- Annalake----- Stutts----- Arnheim-----	7e	3a-s 4a L-2c	Not prime farmland	Not hydric Not hydric Hydric	ATD TM FMC
5170----- Minocqua----- Pleine----- Cathro-----	6w	4c 3c M/3c	Not prime farmland	Hydric Hydric Hydric	TMC TTM/FI TTM/FI
5171B----- Tula----- Wormet----- Gogebic, sandy substratum-----	7s	3b-af 3/5b 3a-af	Not prime farmland	Not hydric Not hydric Not hydric	TMC-D/AVO-CI TMC-D ATD/AVO
5172B----- Gogebic, sandy substratum----- Pence----- Cathro-----	4s	3a-af 4a M/3c	Not prime farmland	Not hydric Not hydric Hydric	ATD/AVO TMV/AQV TTM/FI
5172C----- Gogebic, sandy substratum----- Pence----- Cathro-----	6s	3a-af 4a M/3c	Not prime farmland	Not hydric Not hydric Hydric	ATD/AVO TMV/AQV TTM/FI
5172D----- Gogebic, sandy substratum----- Pence----- Cathro-----	7e	3a-af 4a M/3c	Not prime farmland	Not hydric Not hydric Hydric	ATD/AVO TMV/AQV TTM/FI
5173D----- Gogebic, sandy substratum----- Pence-----	7e	3a-af 4a	Not prime farmland	Not hydric Not hydric	ATD/AVO TMV/AQV

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LEGEND

- 1 Amnicon-Cuttre-Bergland association
- 2 Argonne-Net-Cathro association
- 3 Flintsteel-Rockland-Loggerhead association
- 4 Gogebic, sandy substratum-Cathro-Gay association
- 5 Gogebic, sandy substratum-Cathro-Karlin association
- 6 Gogebic-Amasa-Cathro association
- 7 Gogebic-Cathro-Gay association
- 8 Gogebic-Cathro-Tula association
- 9 Gogebic-Gay-Cathro association
- 10 Gogebic-Michigamme-Flintsteel association
- 11 Gogebic-Oldman association
- 12 Gogebic-Cathro-Rock outcrop association
- 13 Gogebic-Tula-Cathro association
- 14 Gogebic-Tula-Rock outcrop association
- 15 Gogebic-Wakefield-Cathro association
- 16 Karlin-Amasa-Cathro association
- 17 Keweenaw-Amasa-Loxley association
- 18 Pence-Lode-Tawas association
- 19 Pence-Vilas-Dawson association
- 20 Pence-Vilas-Tawas association

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
UNITED STATES FOREST SERVICE
MICHIGAN DEPARTMENT OF AGRICULTURE
MICHIGAN AGRICULTURAL EXPERIMENT STATION
MICHIGAN STATE UNIVERSITY, COOPERATIVE EXTENSION SERVICE
MICHIGAN TECHNOLOGICAL UNIVERSITY

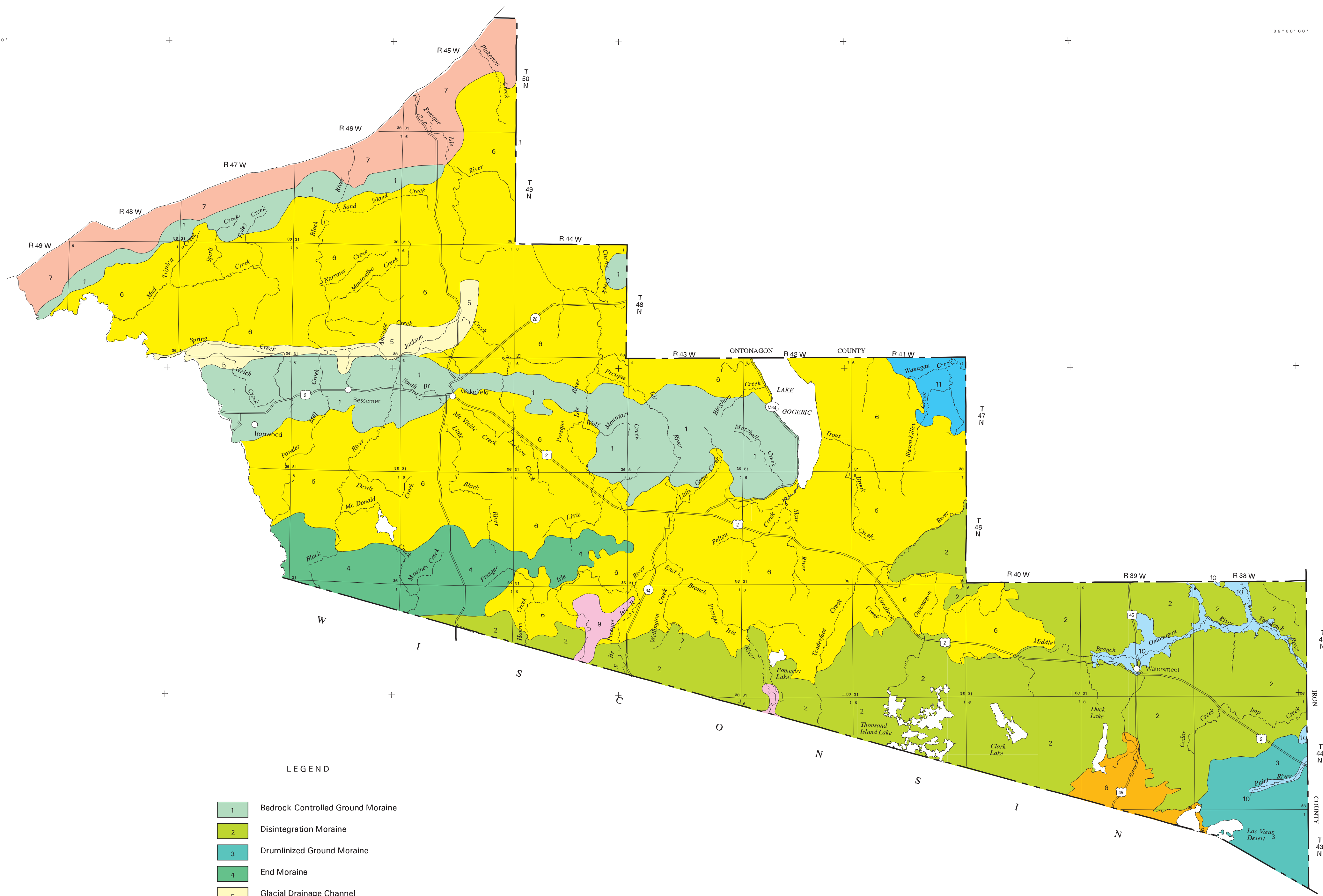
GENERAL SOIL MAP
GOGEBIC COUNTY, MICHIGAN

1 0 1 2 3
MILES

1 0 1 2 3 4 5 6
KILOMETERS

SCALE = 1:205000

Each area outlined on this map consists of more than one kind of soil. The map is thus meant for general planning rather than a basis for decisions on the use of specific tracts.

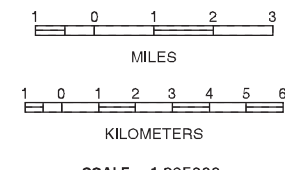


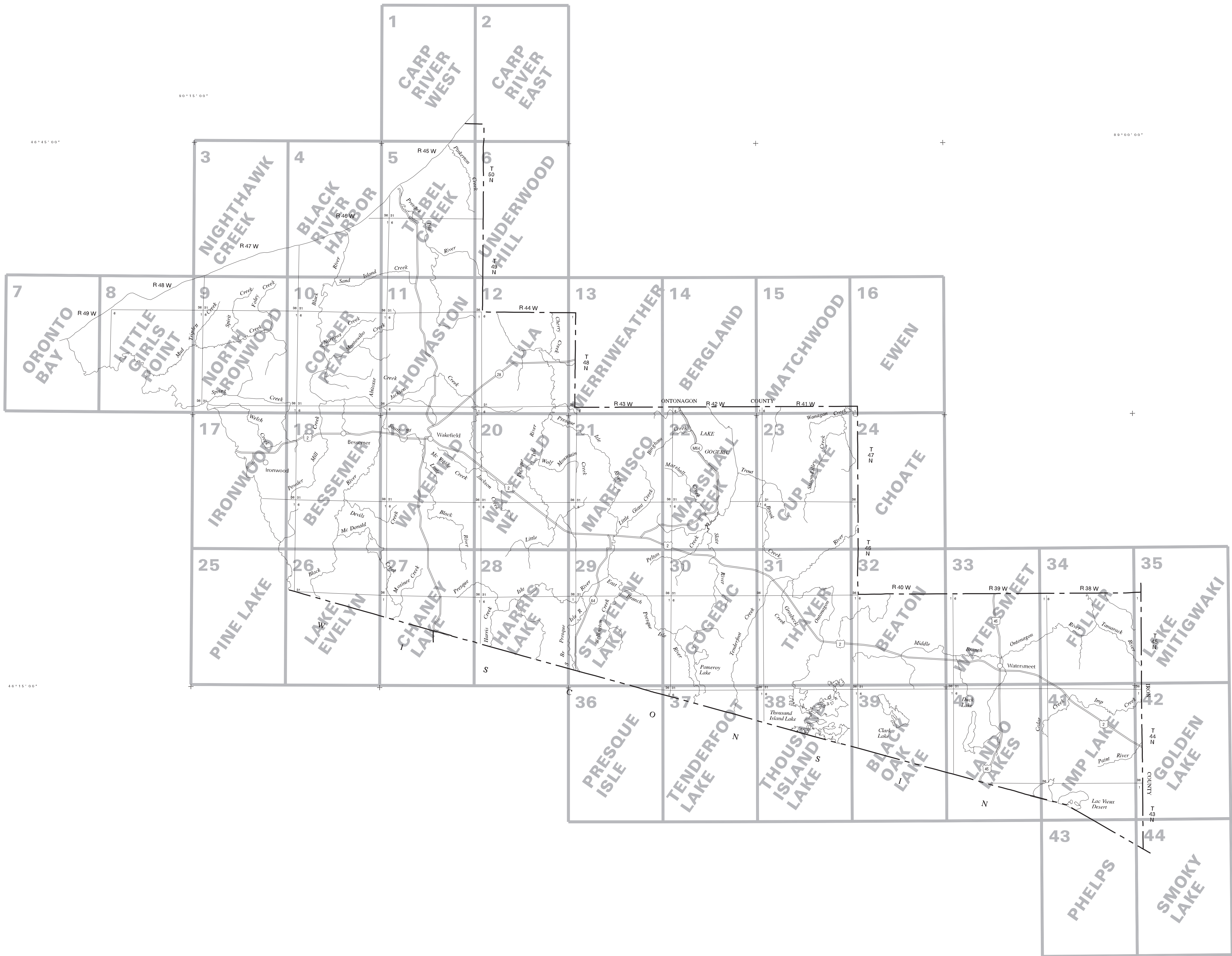
LEGEND

- 1 Bedrock-Controlled Ground Moraine
- 2 Disintegration Moraine
- 3 Drumlinized Ground Moraine
- 4 End Moraine
- 5 Glacial Drainage Channel
- 6 Ground Moraine
- 7 Lake Terrace
- 8 Outwash Plain
- 9 Pitted Outwash Plain
- 10 River Valleys and Terraces
- 11 Till-Floored Lake Plain

SECTIONALIZED TOWNSHIP					
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

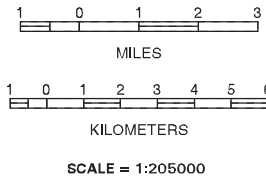
LANDFORM MAP
GOGEBIC COUNTY, MICHIGAN





SECTIONALIZED TOWNSHIP					
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

INDEX TO MAP SHEETS
GOGEBIC COUNTY, MICHIGAN



SOIL LEGEND

Map symbols consist of numbers or a combination of numbers and a letter. The initial number represents the kind of map unit. An uppercase letter following the number indicates the class of slope. Symbols without a slope class letter are for map units that are nearly level or for miscellaneous areas.

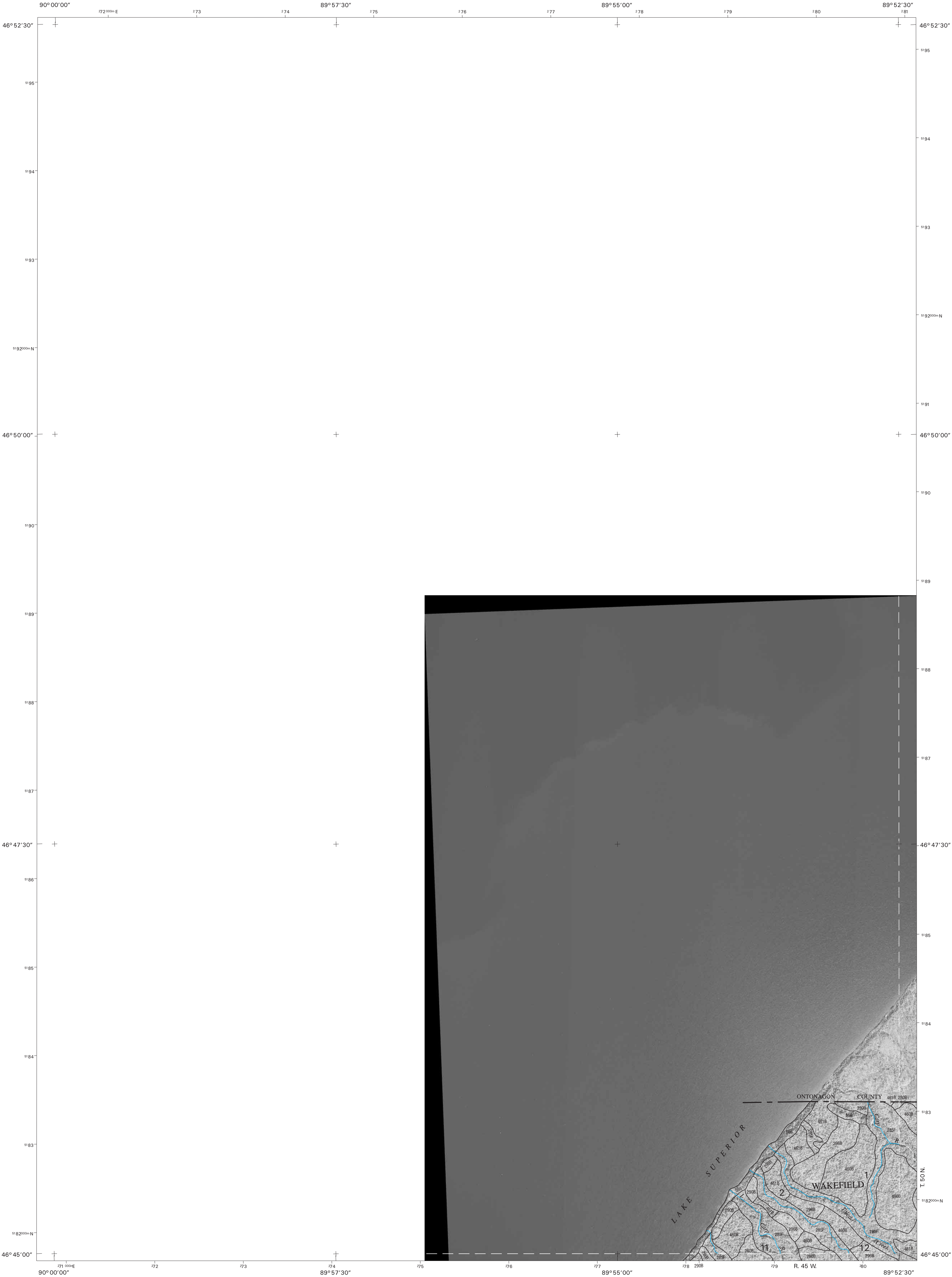
SYMBOL	NAME
7	Histosols and Aquents, 0 to 1 percent slopes, ponded
10	Witbeck muck, 0 to 1 percent slopes
12A	Monico loam, 0 to 3 percent slopes
13B	Argonne fine sandy loam, 0 to 6 percent slopes
13C	Argonne fine sandy loam, 6 to 18 percent slopes
13D	Argonne fine sandy loam, 18 to 35 percent slopes
15B	Wabeno silt loam, 1 to 6 percent slopes
15C	Wabeno silt loam, 6 to 18 percent slopes
16A	Fence silt loam, 0 to 2 percent slopes
17B	Lode silt loam, 1 to 6 percent slopes
17C	Lode silt loam, 6 to 18 percent slopes
20B	Pence-Lode complex, 1 to 6 percent slopes
20C	Pence fine sandy loam, 6 to 18 percent slopes
21	Minocqua-Leafriver complex, 0 to 1 percent slopes
23B	Chabeneau-Karlin-Pence complex, 1 to 6 percent slopes
26B	Stambaugh silt loam, 1 to 6 percent slopes
27	Lupton and Tawas mucks, 0 to 1 percent slopes
28	Dawson, Greenwood, and Loxley soils, 0 to 1 percent slopes
29B	Pence sandy loam, very deep water table, 1 to 6 percent slopes
31	Evar-Tawas complex, 0 to 1 percent slopes, frequently flooded
32A	Net loam, 0 to 2 percent slopes
35A	Beechwood muck, 0 to 4 percent slopes
36	Gay-Pleine complex, 0 to 1 percent slopes, stony
37B	Gogebic-Tula-Lupton complex, 0 to 6 percent slopes
38B	Gogebic fine sandy loam, sandy substratum, 1 to 6 percent slopes, stony
38C	Gogebic fine sandy loam, sandy substratum, 6 to 18 percent slopes, stony
38D	Gogebic fine sandy loam, sandy substratum, 18 to 35 percent slopes, stony
39B	Gogebic silt loam, sandy substratum, 1 to 6 percent slopes, stony
39C	Gogebic silt loam, sandy substratum, 6 to 18 percent slopes, stony
39D	Gogebic silt loam, sandy substratum, 18 to 35 percent slopes, stony
41	Lupton-Pleine-Cathro complex, 0 to 1 percent slopes
42	Ausable, frequently flooded-Tawas complex, 0 to 1 percent slopes
43B	Karlin-Pence complex, 1 to 6 percent slopes
43C	Karlin-Pence complex, 6 to 18 percent slopes
43D	Karlin-Pence complex, 18 to 35 percent slopes
44B	Karlin-Keweenaw-Saronia, dense substratum, complex, 1 to 6 percent slopes
44C	Karlin-Keweenaw-Saronia, dense substratum, complex, 6 to 25 percent slopes
44D	Karlin-Keweenaw-Saronia, dense substratum, complex, 25 to 50 percent slopes
46C	Amasa-Karlin complex, esker, 2 to 18 percent slopes
46D	Amasa-Karlin complex, esker, 18 to 35 percent slopes
46E	Amasa-Karlin complex, esker, 35 to 55 percent slopes
47B	Amasa-Karlin complex, esker, 55 to 75 percent slopes
48C	Karlin, very deep water table-Noseum-Gay complex, 0 to 6 percent slopes
48F	Karlin-Michigamme complex, 2 to 18 percent slopes, rocky
49B	Karlin-Michigamme complex, 25 to 75 percent slopes, very rocky
49B	Pelissier-Sarwet complex, 1 to 6 percent slopes
49C	Pelissier-Sarwet complex, 6 to 25 percent slopes
49D	Pelissier gravelly sandy loam, 25 to 50 percent slopes
52B	Pence-Vilas complex, 1 to 6 percent slopes
52C	Pence-Vilas complex, 6 to 18 percent slopes
53B	Manitowish-Croswell complex, 1 to 6 percent slopes
57B	Karlin-Manitowish complex, 1 to 6 percent slopes
57C	Karlin-Manitowish complex, 6 to 18 percent slopes
58B	Vilas, very deep water table-Croswell-Pence, very deep water table, complex, 1 to 6 percent slopes
61	Tawas-Kinross complex, 0 to 2 percent slopes
62B	Pelkie loamy very fine sand, 1 to 6 percent slopes
83	Bowstring muck, 0 to 1 percent slopes, frequently flooded
141D	Oldman very gravelly silt loam, 8 to 15 percent slopes, very stony
141E	Oldman very gravelly silt loam, 15 to 35 percent slopes, very stony
141F	Porkies very stony silt loam, 35 to 70 percent slopes, very stony
214B	Amnicon-Bergland complex, 0 to 6 percent slopes
216B	Amnicon silt loam, 2 to 8 percent slopes
217A	Cuttre silt loam, 0 to 3 percent slopes
218	Bergland mucky clay, 0 to 1 percent slopes
219B	Payseor-Froberg complex, 0 to 4 percent slopes
222	Matchwood mucky clay, 0 to 2 percent slopes, frequently ponded
225A	Cuttre-Bergland complex, 0 to 3 percent slopes
226B	Froberg clay, 1 to 6 percent slopes
230B	Moquah-Arnheim complex, 0 to 3 percent slopes, frequently flooded
231	Matchwood-Dorval complex, 0 to 1 percent slopes
233	Schaat Creek silt loam, 0 to 1 percent slopes, frequently flooded
239D	Miskoaki silt loam, 15 to 35 percent slopes
277B	Kellogg, sandy substratum-Allendale complex, 0 to 4 percent slopes
280B	Flintsteel loam, 1 to 8 percent slopes
280C	Flintsteel loam, 8 to 15 percent slopes
282B	Big Iron-Flintsteel complex, 0 to 4 percent slopes
283B	Loggerhead-Noseum-Ubly complex, 1 to 6 percent slopes
283C	Loggerhead-Noseum-Ubly complex, 6 to 12 percent slopes
284	Aquents, ponded-Gull Point, frequently flooded, complex, 0 to 1 percent slopes
285F	Rockland-Arnheim, frequently flooded, complex, 0 to 70 percent slopes
286A	Big Iron-Belding complex, 0 to 2 percent slopes
287	Trap Falls-Tonkey complex, 0 to 1 percent slopes

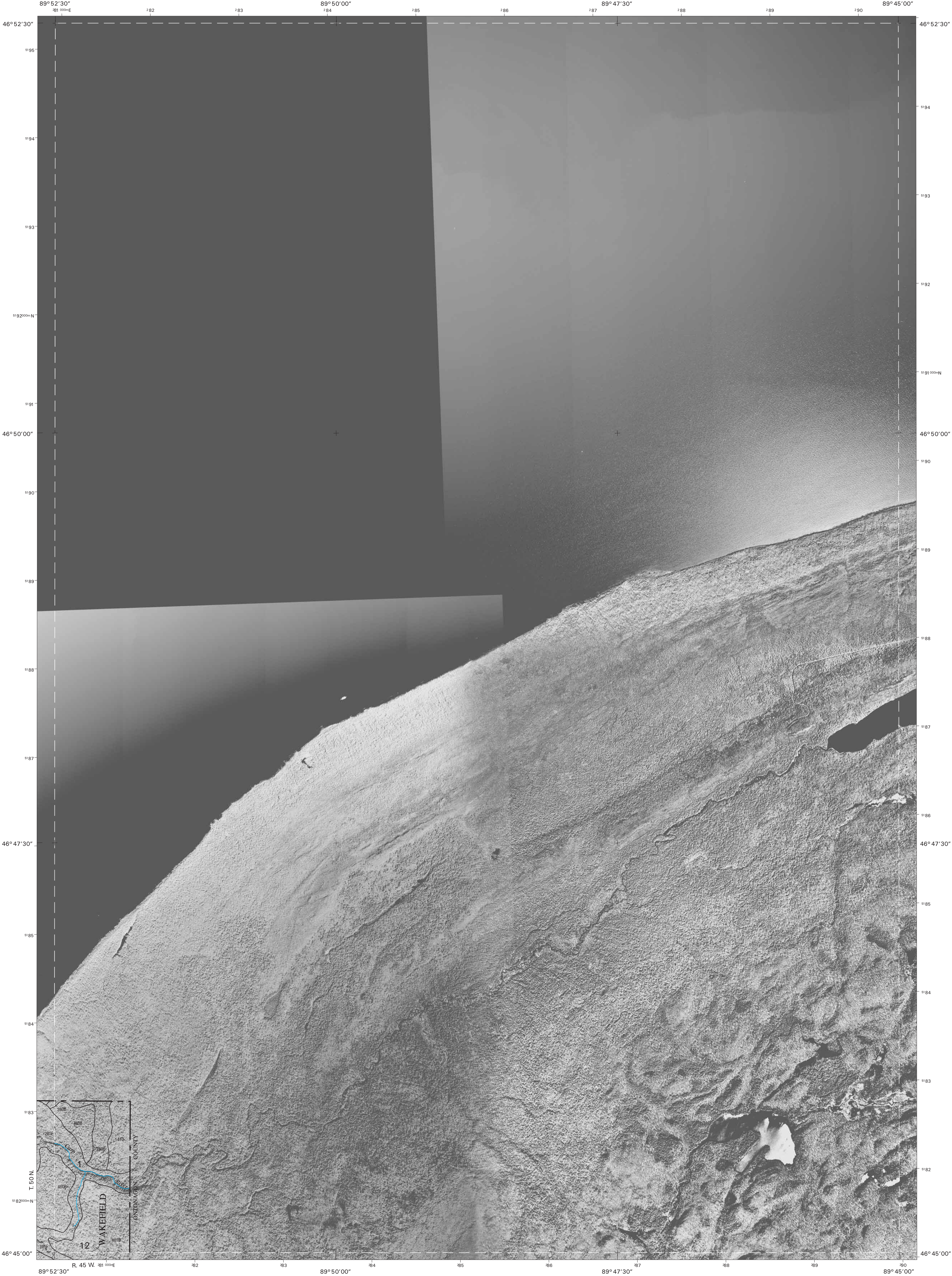
SYMBOL	NAME
289B	Amasa very cobbly silt loam, beach ridges, 1 to 6 percent slopes
290B	Flintsteel silt loam, 1 to 6 percent slopes
290C	Flintsteel silt loam, 6 to 18 percent slopes
291B	Kalkaska sand, 0 to 8 percent slopes
291D	Kalkaska sand, 8 to 18 percent slopes
292B	Manido-Richter complex, 0 to 6 percent slopes
293A	Wainola-Trap Falls complex, 0 to 3 percent slopes
296B	Manido-Fence-Gogebic, sandy substratum, complex, 1 to 6 percent slopes
296D	Manido-Sporley-Gogebic, sandy substratum, complex, 18 to 35 percent slopes
299B	Zandi-Amasa-Flintsteel complex, 0 to 6 percent slopes
299C	Zandi-Amasa-Flintsteel complex, 6 to 18 percent slopes
301A	Moodig loam, 0 to 4 percent slopes
302B	Manitowish sandy loam, 1 to 6 percent slopes
302C	Manitowish sandy loam, 6 to 18 percent slopes
303	Bowstring-Arnheim complex, 0 to 1 percent slopes, frequently flooded
305B	Keweenaw-Siskiwit complex, 1 to 6 percent slopes
305C	Keweenaw-Siskiwit complex, 6 to 18 percent slopes
307	Lupton and Cathro soils, 0 to 1 percent slopes
309	Cathro muck, drainageway, 0 to 1 percent slopes
310B	Gogebic fine sandy loam, 1 to 6 percent slopes, stony
310C	Gogebic fine sandy loam, 6 to 18 percent slopes, stony
310D	Gogebic fine sandy loam, 18 to 35 percent slopes, stony
310E	Schweitzer fine sandy loam, 35 to 55 percent slopes, stony
311B	Tula-Gogebic complex, 0 to 6 percent slopes, stony
312A	Tula-Foxpaw-Gay complex, 0 to 4 percent slopes, stony
316	Gay loam, 0 to 1 percent slopes, stony
317B	Gogebic silt loam, 1 to 6 percent slopes, stony
317C	Gogebic silt loam, 6 to 18 percent slopes, stony
317D	Gogebic silt loam, 18 to 35 percent slopes, stony
319B	McMillan-Noseum complex, 1 to 6 percent slopes
319C	McMillan-Islandlake complex, 6 to 18 percent slopes
319D	McMillan-Islandlake complex, 18 to 35 percent slopes
319E	McMillan-Islandlake complex, 35 to 55 percent slopes
322B	Stutts-Keweenaw complex, 1 to 6 percent slopes
322C	Stutts-Keweenaw complex, 6 to 18 percent slopes
322D	Stutts-Keweenaw complex, 18 to 35 percent slopes
323B	Keweenaw-Kalkaska complex, 1 to 6 percent slopes
323C	Keweenaw-Kalkaska complex, 6 to 18 percent slopes
323D	Keweenaw-Kalkaska complex, 18 to 35 percent slopes
325B	Siskiwit-Gogebic complex, 1 to 6 percent slopes, stony
325C	Siskiwit-Gogebic complex, 6 to 18 percent slopes, stony
327	Foxpaw-Sarwet complex, 0 to 1 percent slopes
328B	Annalake-Karlin complex, 1 to 6 percent slopes
328C	Annalake-Karlin complex, 6 to 18 percent slopes
328D	Karlin-Zandi complex, 18 to 35 percent slopes
329A	Tula silt loam, 0 to 4 percent slopes
351B	Gogebic silt loam, 1 to 6 percent slopes, rocky, very stony
351C	Gogebic silt loam, 6 to 18 percent slopes, rocky, very stony
351D	Gogebic silt loam, 18 to 35 percent slopes, rocky, very stony
351E	Schweitzer silt loam, 35 to 55 percent slopes, rocky, very stony
351F	Schweitzer silt loam, 55 to 75 percent slopes, rocky, very stony
353A	Tula fine sandy loam, 0 to 4 percent slopes, stony
354B	Gogebic fine sandy loam, 1 to 6 percent slopes, rocky, very stony
354C	Gogebic fine sandy loam, 6 to 18 percent slopes, rocky, very stony
354D	Gogebic fine sandy loam, 18 to 35 percent slopes, rocky, very stony
354E	Schweitzer fine sandy loam, 35 to 55 percent slopes, rocky, very stony
354F	Schweitzer fine sandy loam, 55 to 70 percent slopes, rocky, very stony
363C	Talus-Arcadian complex, 6 to 18 percent slopes, very rocky
363D	Talus-Arcadian complex, 18 to 35 percent slopes, very rocky
363E	Talus-Arcadian complex, 35 to 55 percent slopes, very rocky
363F	Talus-Arcadian complex, 55 to 75 percent slopes, very rocky
364F	Talus, 35 to 75 percent slopes
365F	Rock outcrop, 75 to 100 percent slopes
369C	Dishno-Gogebic-Peshekee-Rock outcrop complex, 6 to 18 percent slopes, very stony
369D	Dishno-Gogebic-Peshekee-Rock outcrop complex, 18 to 35 percent slopes, very stony
369E	Michigamme-Schweitzer-Peshekee-Rock outcrop complex, 35 to 55 percent slopes, very stony
369F	Michigamme-Schweitzer-Peshekee-Rock outcrop complex, 55 to 75 percent slopes, very stony
370E	Peshekee-Rock outcrop complex, 35 to 55 percent slopes, very stony
370F	Peshekee-Rock outcrop complex, 55 to 75 percent slopes, very stony
375	Dumps and Pits, mine
380	Beseman and Greenwood soils, 0 to 1 percent slopes
382	Cathro-Arnheim, frequently flooded, complex, 0 to 1 percent slopes
388	Gay-Tula complex, 0 to 3 percent slopes, stony
398B	Tula-Gay-Wakefield complex, 0 to 6 percent slopes, stony
418	Loxley and Beseman soils, 0 to 1 percent slopes
419	Pleine-Cathro-Gay complex, 0 to 1 percent slopes, stony
424	Gay mucky peat, 0 to 1 percent slopes, stony
425	Foxpaw-Gay complex, 0 to 2 percent slopes, stony
428C	Gogebic-Michigamme complex, 2 to 18 percent slopes, rocky, very stony
428D	Gogebic-Michigamme complex, 18 to 35 percent slopes, rocky, very stony
429B	Gogebic-Peshekee complex, 1 to 6 percent slopes, very rocky, very stony
429C	Gogebic-Peshekee complex, 6 to 18 percent slopes, very rocky, very stony

SYMBOL	NAME
429D	Gogebic-Peshekee complex, 18 to 35 percent slopes, very rocky, very stony
429E	Schweitzer-Peshekee complex, 35 to 55 percent slopes, very rocky, very stony
430B	Stutts loamy fine sand, 1 to 6 percent slopes
430C	Stutts loamy fine sand, 6 to 18 percent slopes
430D	Stutts loamy fine sand, 18 to 35 percent slopes
430E	Stutts loamy fine sand, 35 to 55 percent slopes
432C	Gogebic-Michigamme-Rock outcrop complex, 6 to 18 percent slopes, very stony
432D	Gogebic-Michigamme-Rock outcrop complex, 6 to 35 percent slopes, very stony
432E	Schweitzer-Michigamme-Rock outcrop complex, 18 to 55 percent slopes, very stony
432F	Schweitzer-Michigamme-Rock outcrop complex, 35 to 55 percent slopes, very stony
433B	McMillan fine sandy loam, 1 to 6 percent slopes
433C	McMillan fine sandy loam, 6 to 18 percent slopes
433D	McMillan fine sandy loam, 18 to 35 percent slopes
435C	Kalkaska-Waiska complex, 2 to 18 percent slopes
435D	Kalkaska-Waiska complex, 18 to 35 percent slopes
435E	Kalkaska-Waiska complex, 35 to 55 percent slopes
437B	Manitowish-Channing complex, 0 to 3 percent slopes, occasionally flooded, very rocky
448F	Rockland-Rock outcrop complex, 35 to 70 percent slopes
449C	Flintsteel-Minocqua complex, 0 to 18 percent slopes
452F	Rockland silt loam, 35 to 70 percent slopes, stony
460B	Belding-Manido complex, 1 to 6 percent slopes
461B	Loggerhead loam, 1 to 8 percent slopes
462C	Nonesuch-Rock outcrop complex, 2 to 18 percent slopes
509	Cathro-Minocqua complex, drainageway, 0 to 1 percent slopes
511A	Gogebic-Tula-Chabeneau complex, 0 to 4 percent slopes
519B	Gogebic-Karlin complex, 1 to 6 percent slopes
519C	Gogebic-Karlin complex, 6 to 18 percent slopes
519D	Gogebic-Karlin complex, 18 to 35 percent slopes
522	Pits, sand and gravel
523D	Gogebic, sandy substratum-Karlin complex, 6 to 35 percent slopes
524C	Waiska-Amasa complex, esker, 6 to 18 percent slopes
524D	Waiska-Amasa complex, esker, 18 to 35 percent slopes
524E	Waiska-Amasa complex, esker, 35 to 50 percent slopes
527B	Wakefield loam, 1 to 6 percent slopes, stony
527C	Wakefield loam, 6 to 18 percent slopes, stony
527D	Wakefield loam, 18 to 35 percent slopes, stony
528B	Gogebic-Annalake complex, 1 to 6 percent slopes
528C	Gogebic-Annalake complex, 6 to 18 percent slopes
528D	Gogebic-Annalake complex, 18 to 35 percent slopes
551B	Gogebic-Dishno complex, 1 to 6 percent slopes, rocky, very stony
566	Beach, rubbly, very rocky
576B	Flintsteel-Loggerhead complex, 1 to 6 percent slopes
576C	Flintsteel-Loggerhead complex, 6 to 18 percent slopes
576D	Flintsteel-Loggerhead complex, 18 to 35 percent slopes
577B	Loggerhead-Chabeneau-Arcadian complex, 1 to 6 percent slopes, rocky
577C	Loggerhead-Chabeneau-Arcadian complex, 6 to 18 percent slopes, rocky
577D	Loggerhead-Chabeneau-Arcadian complex, 18 to 35 percent slopes, rocky
578D	Arcadian-Keweenaw complex, lake bench, 6 to 35 percent slopes, rocky
625B	Fence very fine sandy loam, 0 to 6 percent slopes
625C	Fence very fine sandy loam, 6 to 18 percent slopes
626D	Sporley very fine sandy loam, 18 to 35 percent slopes
626E	Sporley very fine sandy loam, 35 to 55 percent slopes
648B	Annalake very fine sandy loam, 0 to 6 percent slopes
648C	Annalake very fine sandy loam, 6 to 18 percent slopes
650	Leafriver muck, 0 to 1 percent slopes
652B	Manido-Annalake complex, 1 to 6 percent slopes
656B	Stutts-Zandi complex, 1 to 6 percent slopes
656C	Stutts-Zandi complex, 6 to 18 percent slopes
656D	Stutts-Zandi complex, 18 to 35 percent slopes
680B	Tonkey-Pleine-Annalake complex, 0 to 1 percent slopes
681	Cathro-Tonkey complex, 0 to 1 percent slopes
683B	Amasa-Oldman complex, 1 to 6 percent slopes
683C	Amasa-Oldman complex, 6 to 18 percent slopes
683D	Amasa-Oldman complex, 18 to 35 percent slopes
684B	Amasa cobbly fine sandy loam, 1 to 6 percent slopes
684C	Amasa cobbly fine sandy loam, 6 to 18 percent slopes
684D	Amasa cobbly fine sandy loam, 18 to 35 percent slopes
686B	Annalake-Robago complex, 0 to 6 percent slopes
688	Cathro-Leafriver complex, 0 to 1 percent slopes, frequently flooded
689B	Chabeneau-Channing-Gogebic complex, 0 to 6 percent slopes, stony
691B	Dishno-Tula-Rock outcrop complex, 0 to 6 percent slopes
691D	Dishno-Tula-Rock outcrop complex, 0 to 35 percent slopes
693B	Chabeneau-Annalake complex, 0 to 6 percent slopes
694D	Annalake-Stutts-Arnheim, frequently flooded, complex, drainageway, 0 to 35 percent slopes
5170	Minocqua-Pleine-Cathro complex, 0 to 2 percent slopes
5171B	Tula-Wormet-Gogebic, sandy substratum, complex, 0 to 6 percent slopes
5172B	Gogebic, sandy substratum-Pence-Cathro complex, 0 to 6 percent slopes
5172C	Gogebic, sandy substratum-Pence-Cathro complex, 0 to 18 percent slopes
5172D	Gogebic, sandy substratum-Pence-Cathro complex, 0 to 35 percent slopes
5173D	Gogebic, sandy substratum-Pence complex, 18 to 35 percent slopes
MW	Miscellaneous water
W	Water

CONVENTIONAL AND SPECIAL
SYMBOLS LEGEND

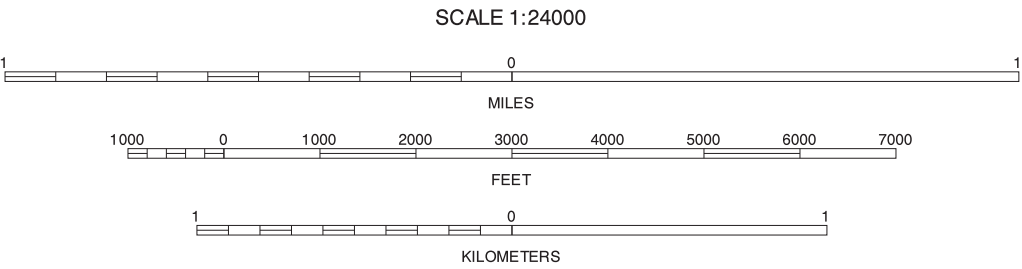
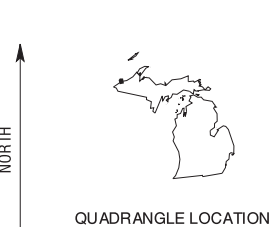
CULTURAL FEATURES	HYDROGRAPHIC FEATURES	SOIL SURVEY FEATURES
BOUNDARIES	STREAMS	SOIL DELINEATIONS AND SYMBOLS
National, state, or province	Perennial stream, double line	LANDFORM FEATURES
County or parish	Perennial stream, single line	Bedrock escarpment
Minor civil division	Intermittent stream	Borrow pits
Reservation (national forest or park, state forest or park)	Drainage end	Clay spot
Limit of soil survey (label) and/or denied access area	DRAINAGE AND IRRIGATION	Depression, closed
Field sheet matchline & neatline	Double-line canal (label)	Gravel pits
Section Corner Tics	Perennial drainage and/or irrigation ditch	Gravelly spot
Section Label	Intermittent drainage and/or irrigation ditch	Marsh or swamp
TRANSPORTATION		Mine or quarry
Other roads		Rock outcrop
RAILROAD		Sandy spot
ROAD EMBLEM AND DESIGNATIONS		Short steep slope
Federal		Spoil area
State		Wet spot
County, farm or ranch		AD HOC FEATURES
		Cut and fill spot
		Loamy spot
		Loam in a clayey area
		Organic spot
		Well drained area





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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

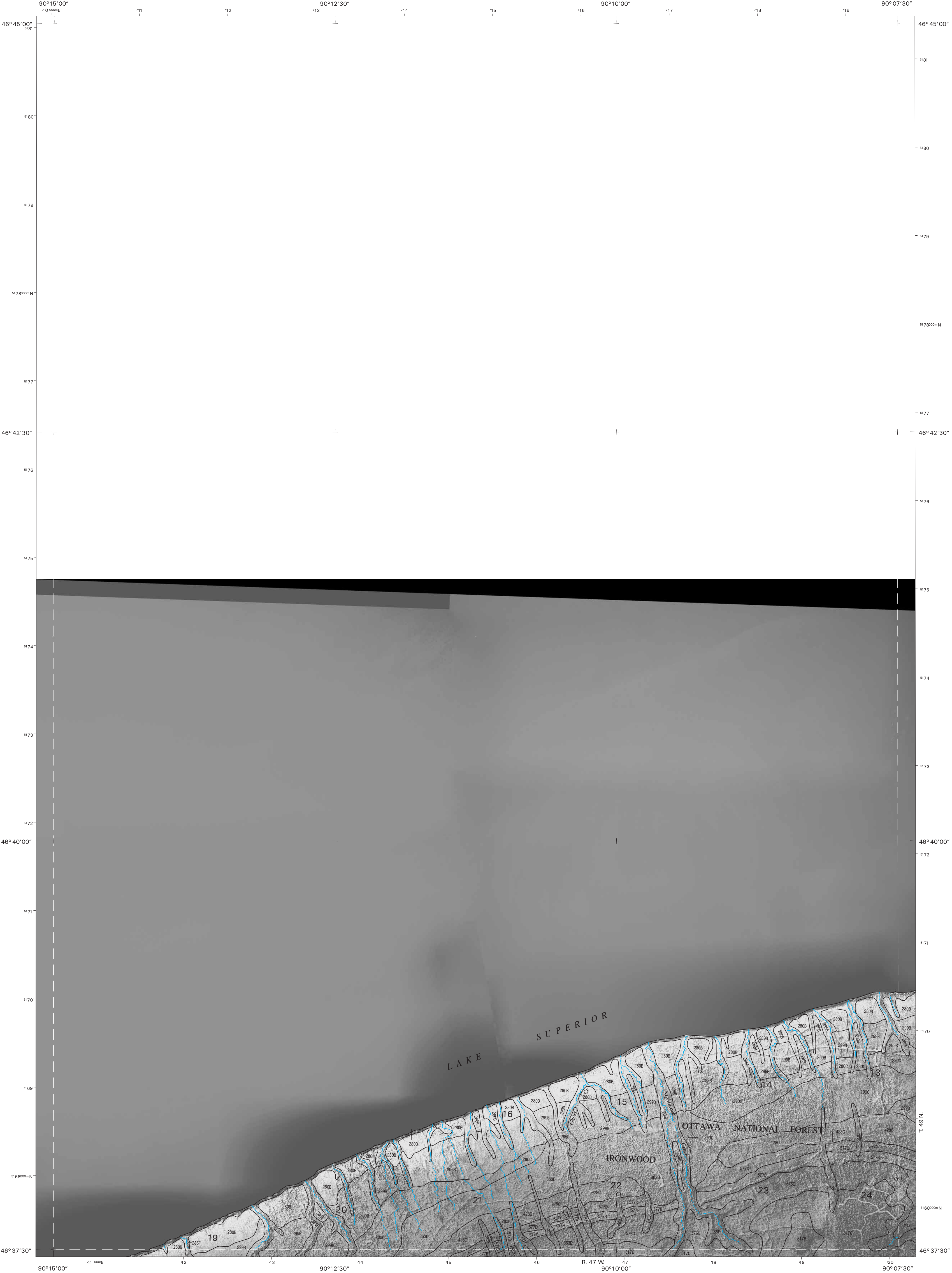


A	B	C	D
1		D	
5	6	E	

INDEX TO ADJOINING 7.5 MAPS

CARP RIVER EAST, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 2 OF 44

Soil map delineations extending beyond the dashed white quadrangle neartine are for reference only and are included on adjacent map sheets.

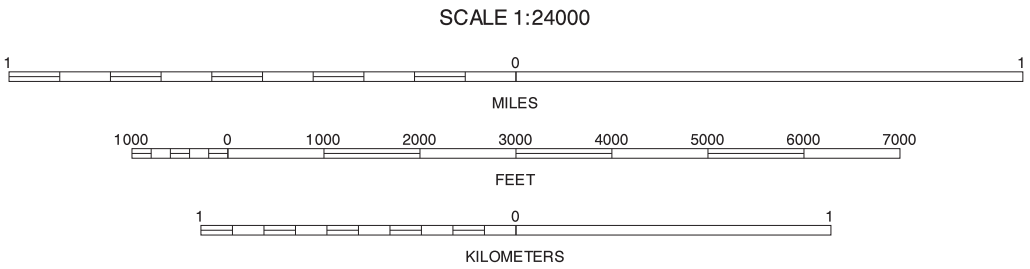


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North American Datum of 1983 (NAD83). GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION

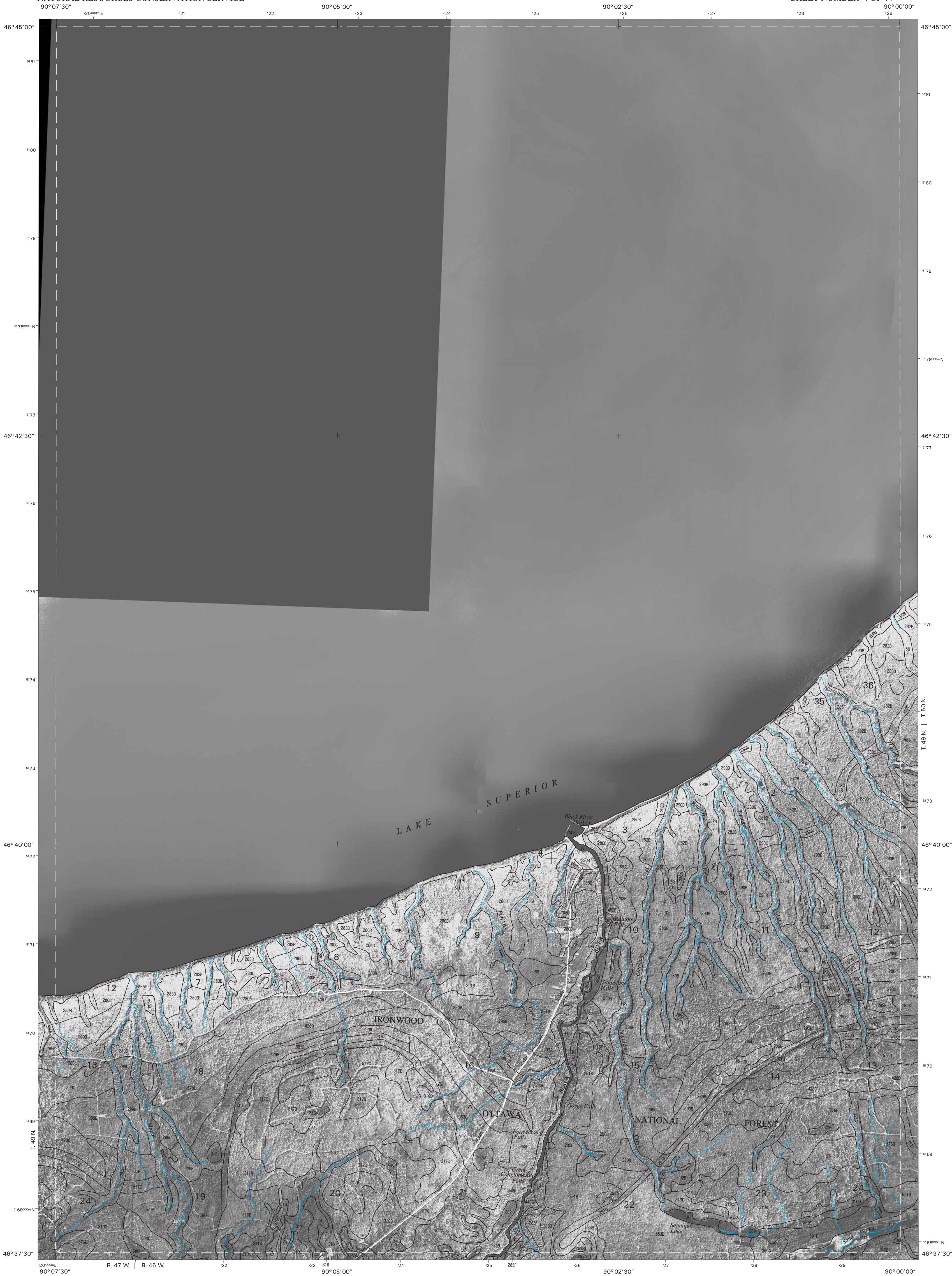


A	B	C	
A	B	C	A ALL WATER
B	B	C	B ALL WATER
C	B	C	C ALL WATER
D	B	C	D ALL WATER
8	9	10	4 BLACK RIVER HARBOR
			8 LITTLE GIRLS POINT
			9 NORTH IRONWOOD
			10 COPPER PEAK

INDEX TO ADJOINING 7.5 MAPS

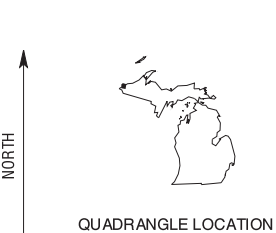
NIGHTHAWK CREEK, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 3 OF 44

Soil map delineations extending beyond the dashed white quadrangle neartine are for reference only and are included on adjacent map sheets.

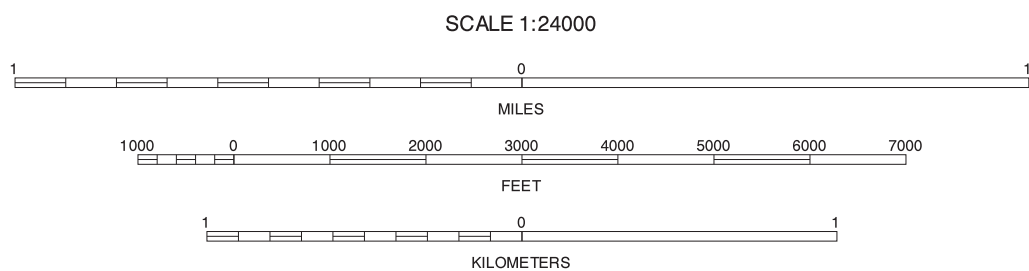


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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
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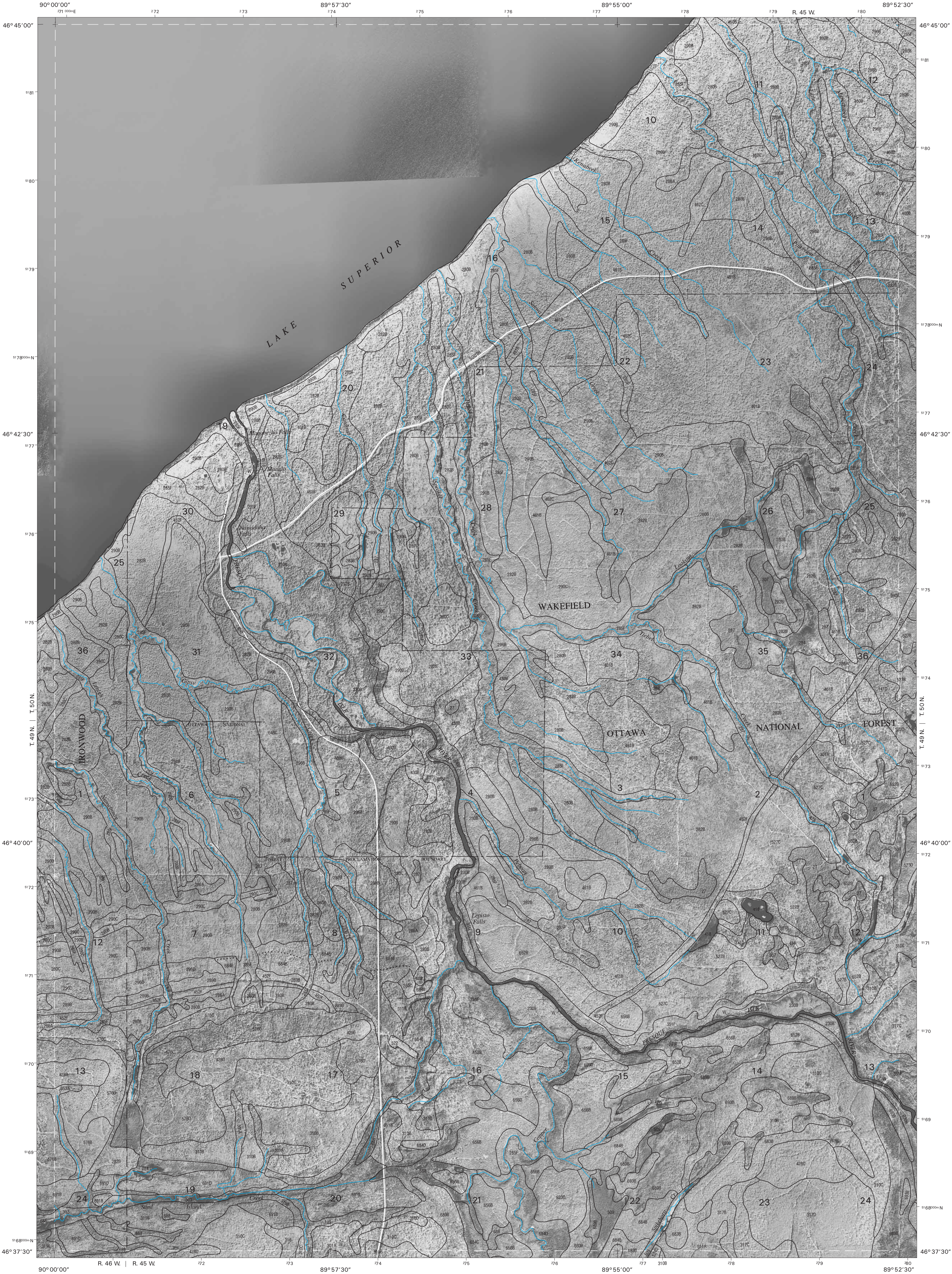
QUADRANGLE LOCATION



A	B	1	A
3	5	11	ALL WATER
9	10	11	ALL WATER WEST
			NIGHTHAWK CREEK
			TIEBEL CREEK
			NORTH IRONWOOD
			COPPER PEAK
			THOMASTON

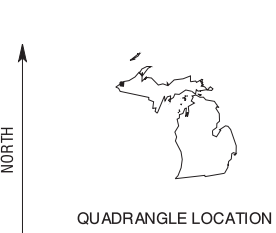
BLACK RIVER HARBOR, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 4 OF 44

Soil map delineations extending beyond the dashed white quadrangle neartine are for reference only and are included on adjacent map sheets.

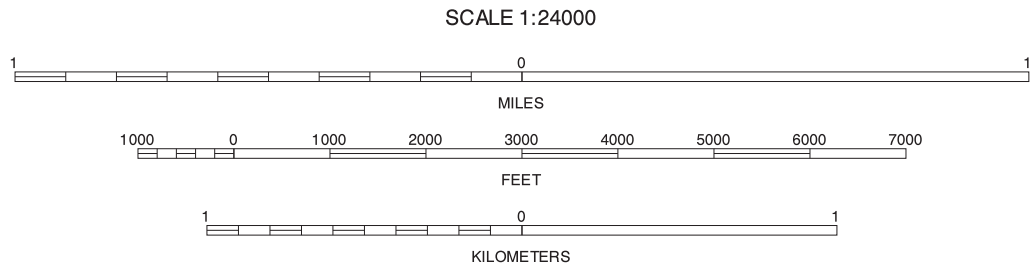


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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION



A	1	2	
1	2	3	4
5	6	7	8
9	10	11	12

INDEX TO ADJOINING 7.5-MINUTE MAPS

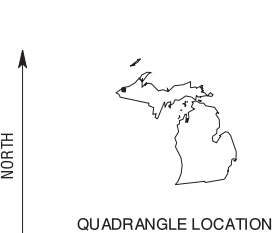
TIEBEL CREEK, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 5 OF 44

Soil map delineations extending beyond the dashed white quadrangle neartine are for reference only and are included on adjacent map sheets.

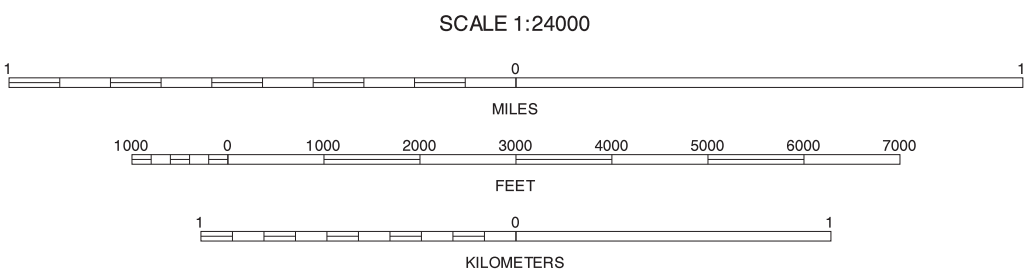


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North American Datum of 1983 (NAD83); GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION

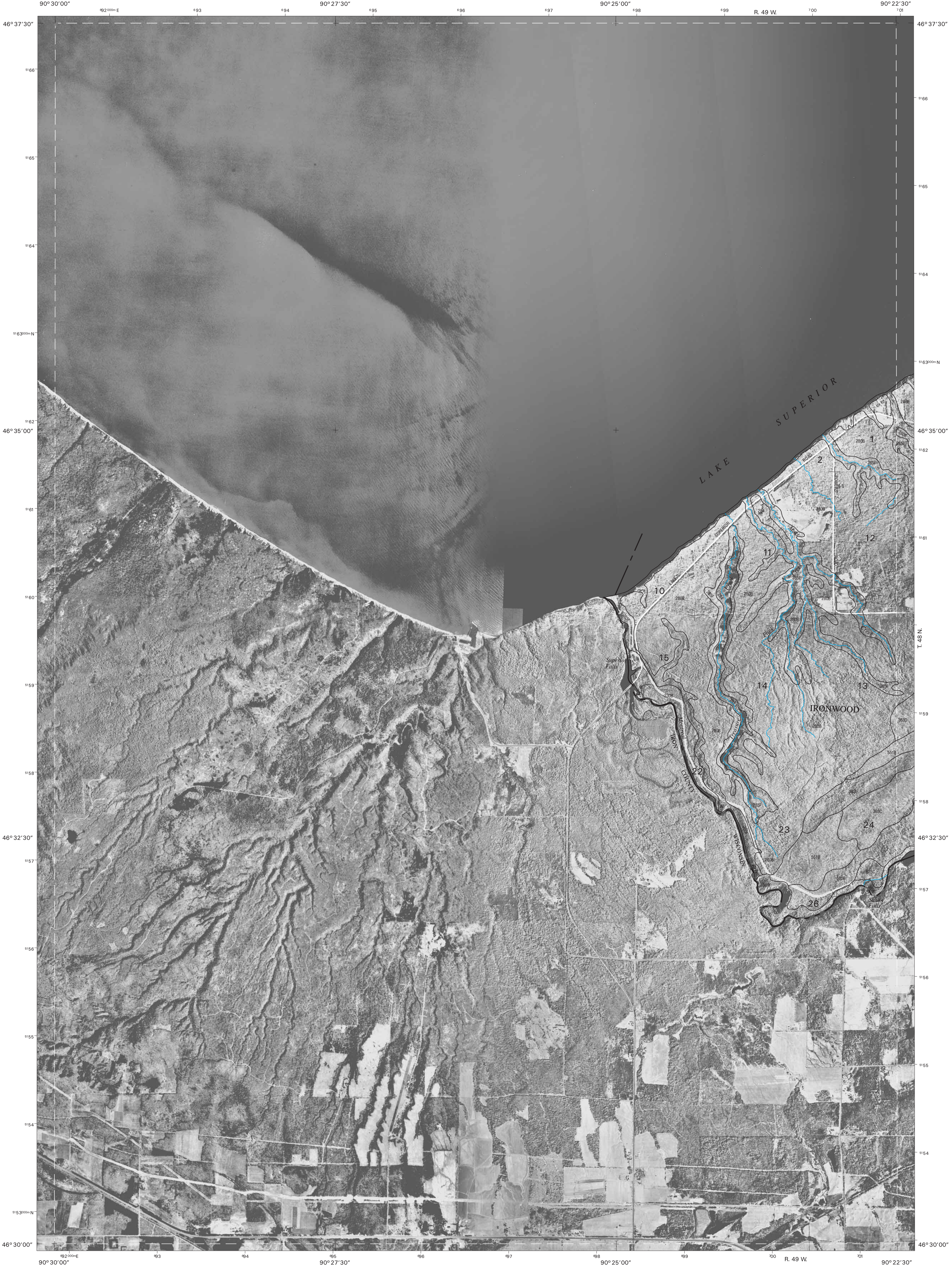


1	2	A	1 CARP RIVER WEST
5		B	2 CARP RIVER EAST
			A GOVERNMENT PEAK
			5 TIEBEL CREEK
			B ALDRIDGE CREEK
11	12	13	11 THOMASTON
			12 TULA
			13 MERRIWEATHER

INDEX TO ADJOINING 7.5 MAPS

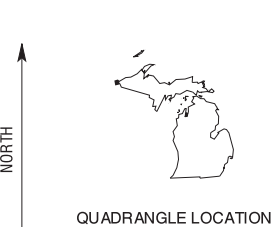
UNDERWOOD HILL, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 6 OF 44

Soil map delineations extending beyond the dashed white quadrangle neartline are for reference only and are included on adjacent map sheets.

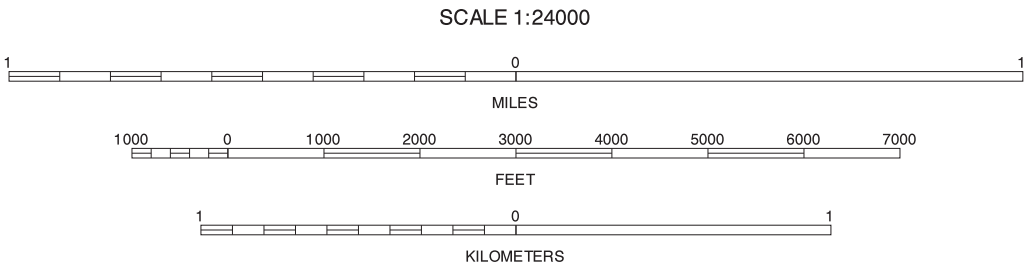


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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION



A	B	C	A ALL WATER
D	E	F	B ALL WATER
E	F	G	C CEDAR
			D LITTLE GIRLS POINT
			E QUINCY
			F SAXON
			G IRON BELT

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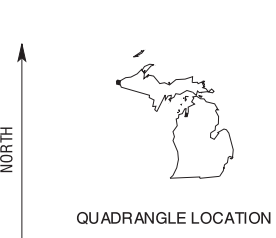
ORONTO BAY, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 7 OF 44

Soil map delineations extending beyond the dashed white quadrangle neoline are for reference only and are included on adjacent map sheets.

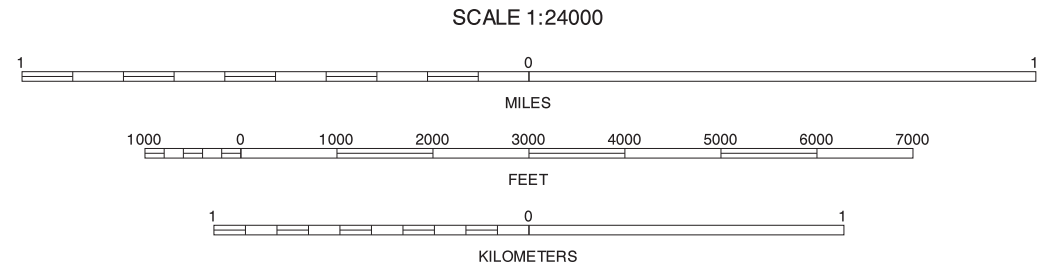


This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies. Base maps are orthorectified aerial photography prepared by the U.S. Department of Interior, Geological Survey, from 1993-1998 aerial photography. Hydrographic, cultural and Public Land Survey System (PLSS) information was acquired from the U.S. Geological Survey. The hydrography layer and the cultural layer were edited to conform with features represented on the publication orthorectified photography and to enhance the clarity of the soils information.

North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION

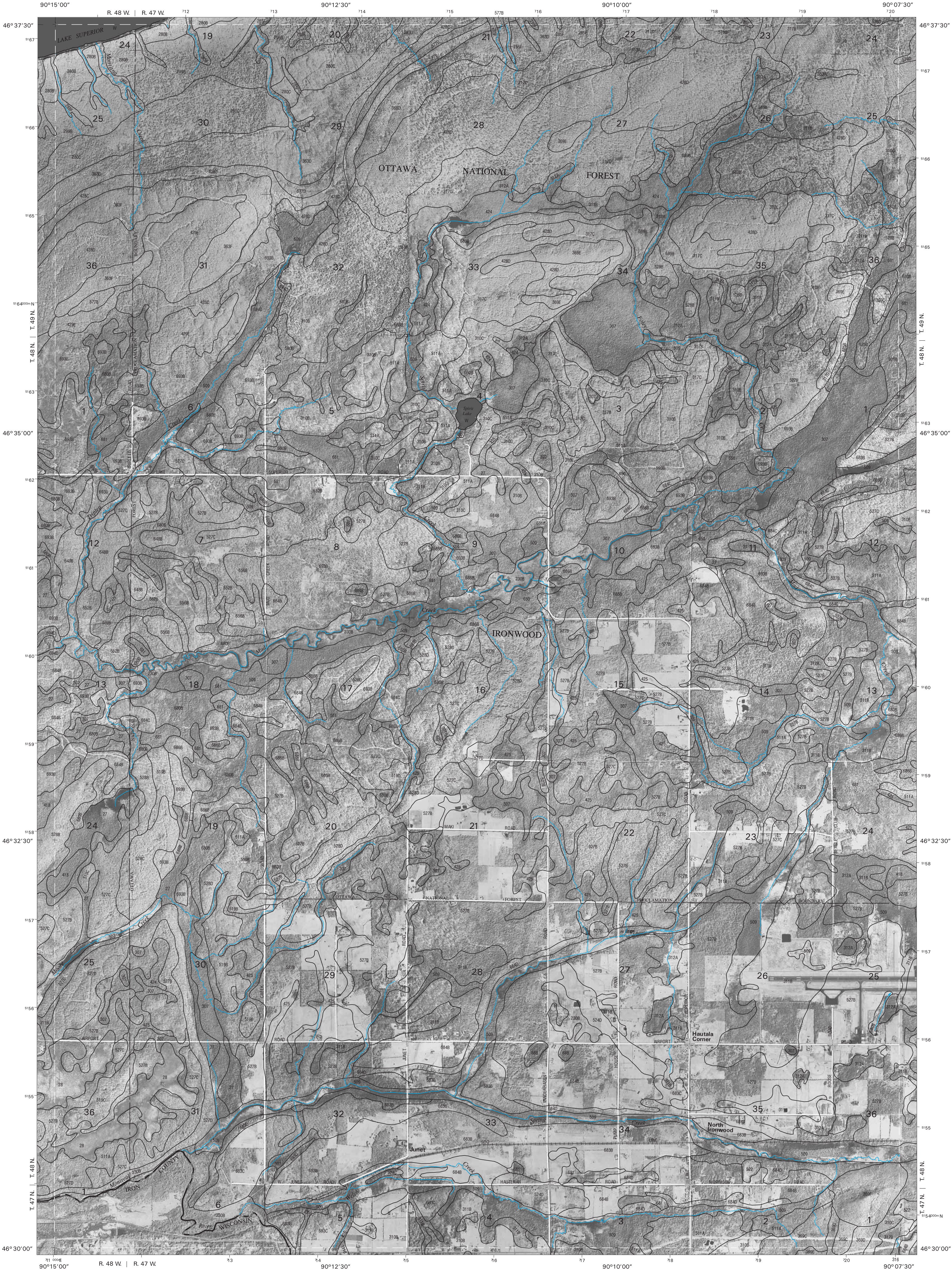


A	B	3	A ALL WATER
7		9	B ALL WATER
C	D	17	C NORTH IRONWOOD
			D IRON BELT
			E IRONWOOD

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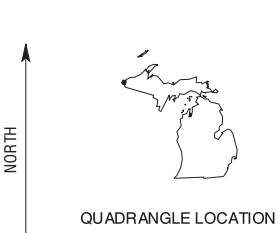
LITTLE GIRLS POINT, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 8 OF 44

Soil map delineations extending beyond the dashed white quadrangle neoline are for reference only and are included on adjacent map sheets.

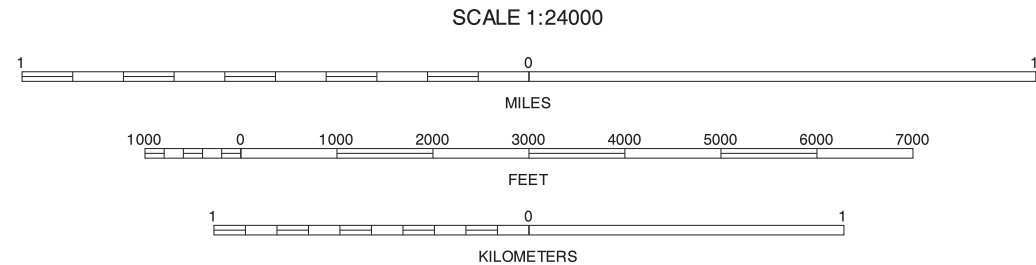


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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION

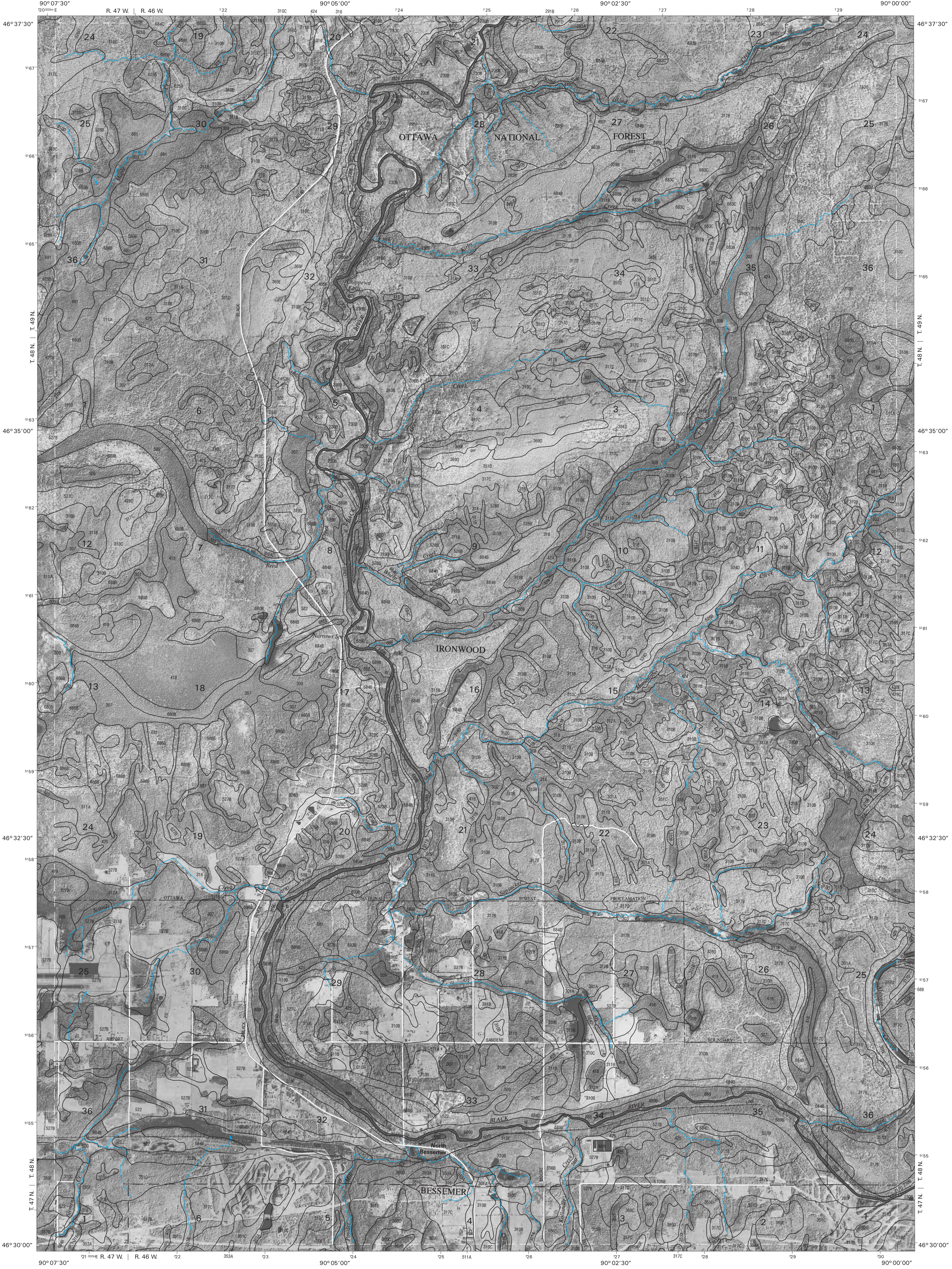


A	3	4	A ALL WATER
			3 NIGHTHAWK CREEK
			4 BLACK RIVER HARBOR
8		10	8 LITTLE GIRLS POINT
			10 COPPER PEAK
			17 IRON BELT
B	17	18	17 IRONWOOD
			18 BESSEMER

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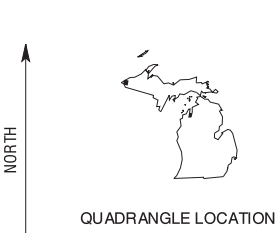
NORTH IRONWOOD, MICHIGAN
7.5 MINUTE SERIES
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Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

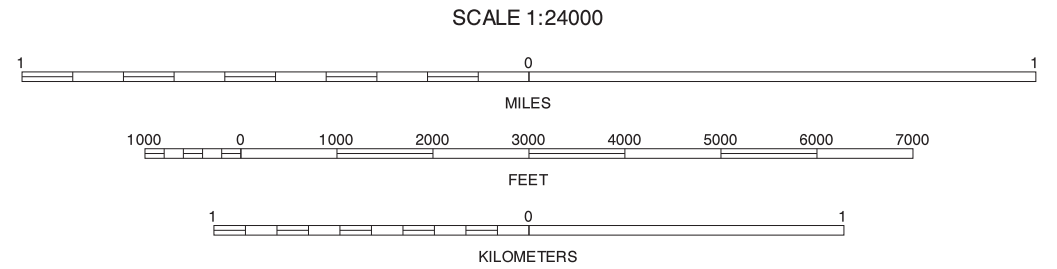


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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION

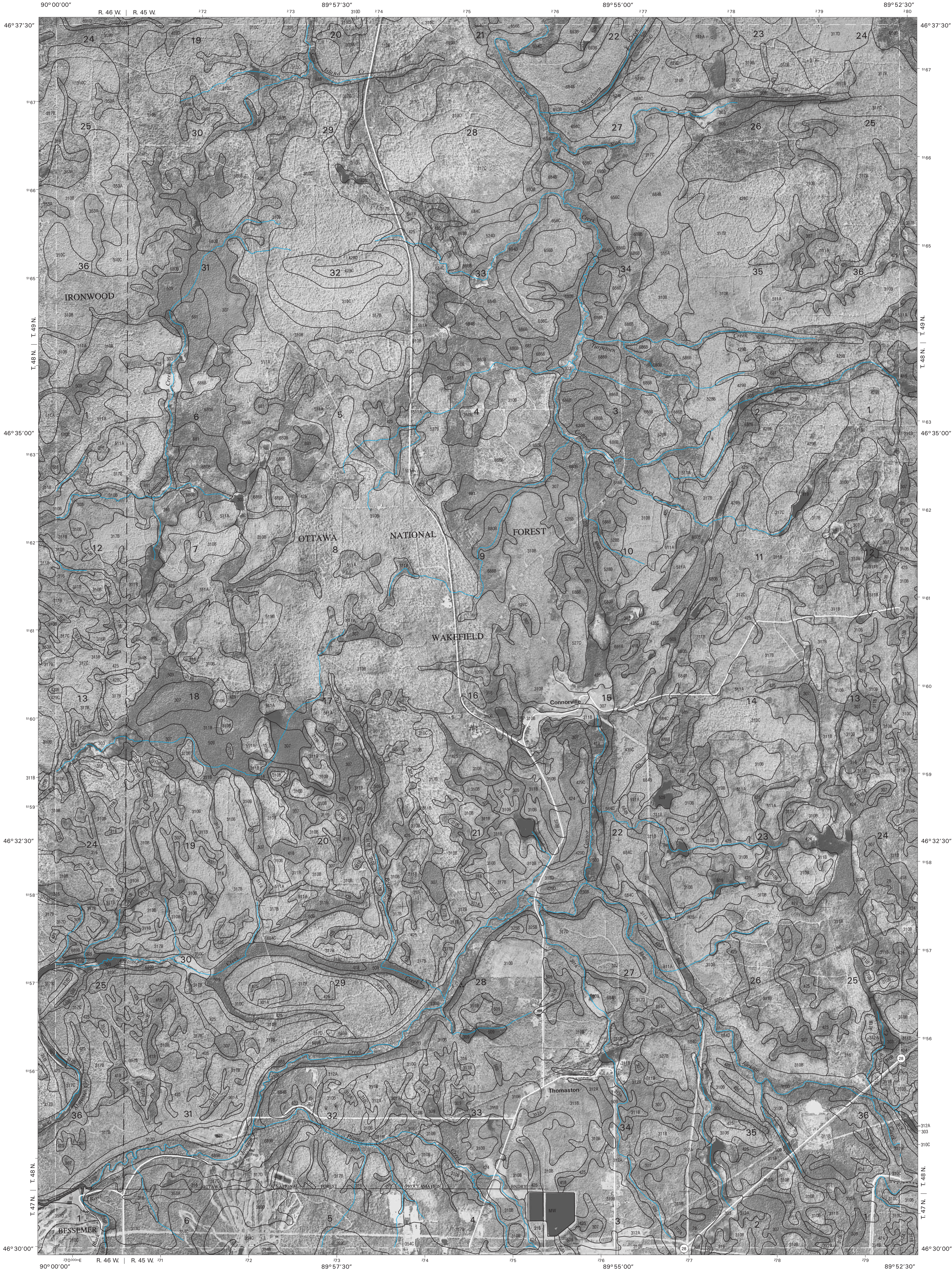


3	4	5
9	11	
17	18	19

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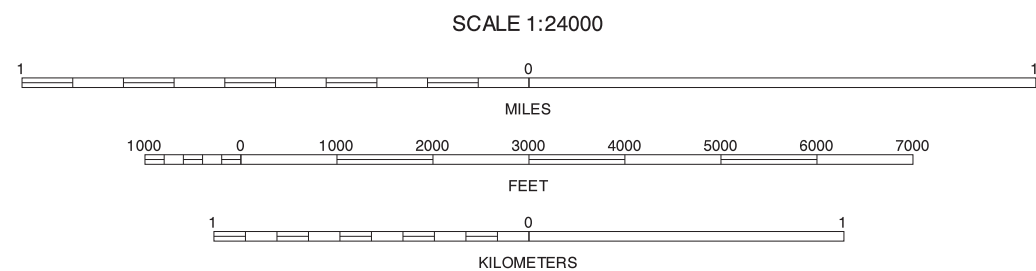
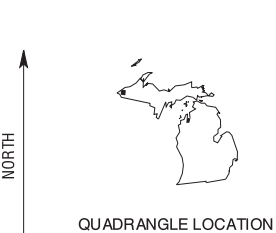
COPPER PEAK, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 10 OF 44

Soil map delineations extending beyond the dashed white quadrangle neartine are for reference only and are included on adjacent map sheets.



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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

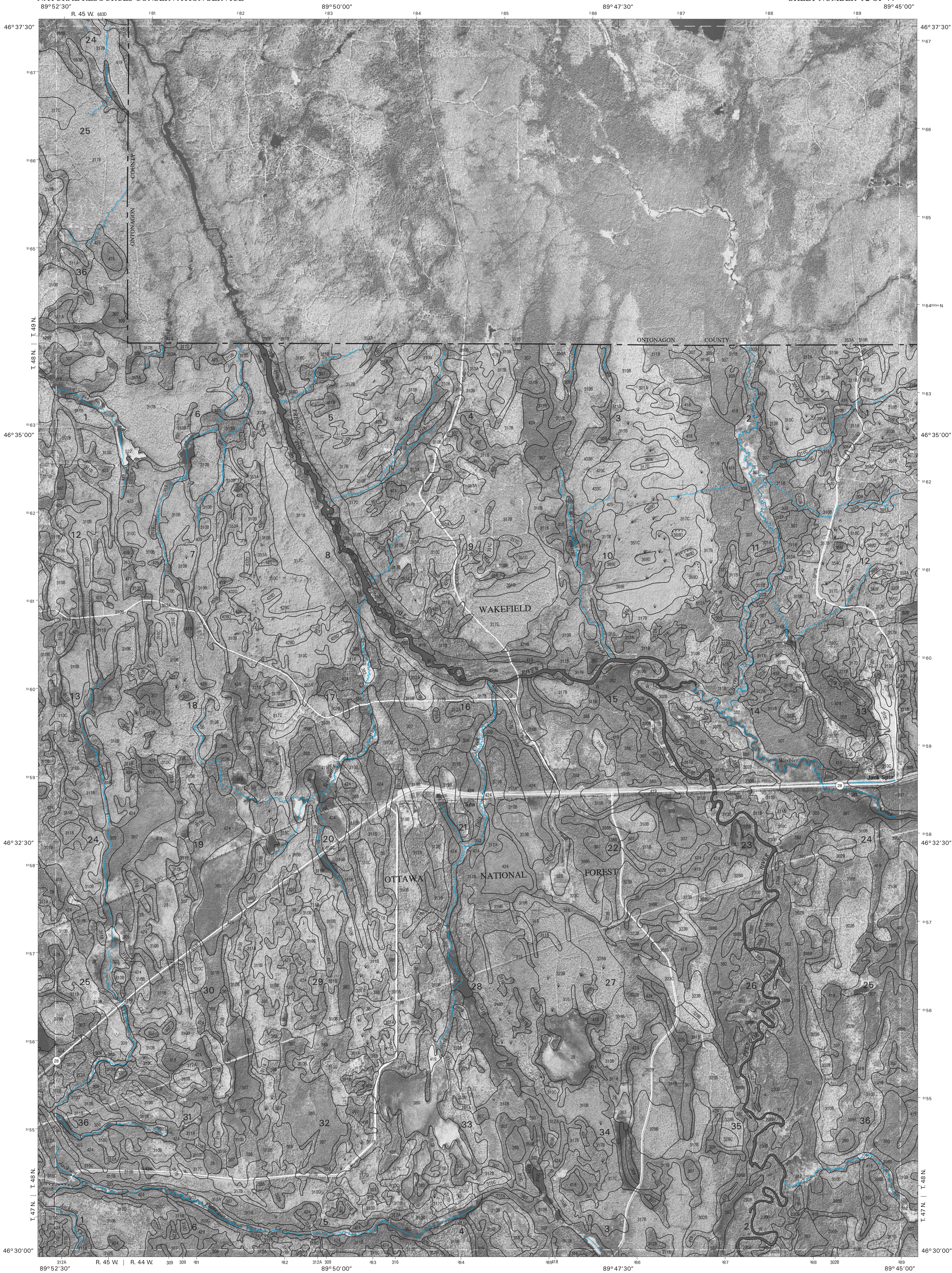


4	5	6
10		12
18	19	20

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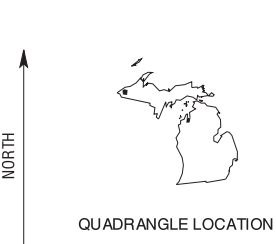
THOMASTON, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 11 OF 44

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

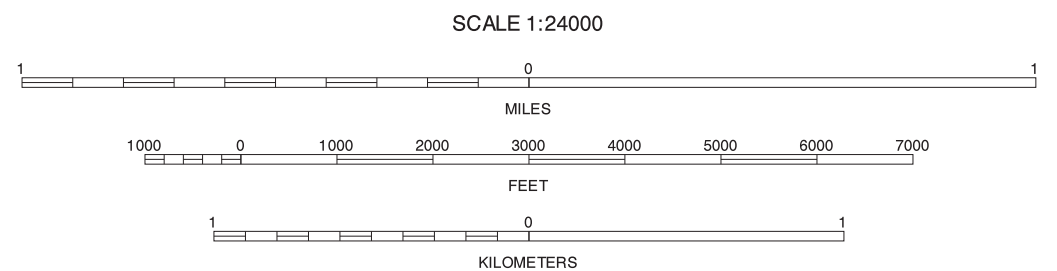


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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION



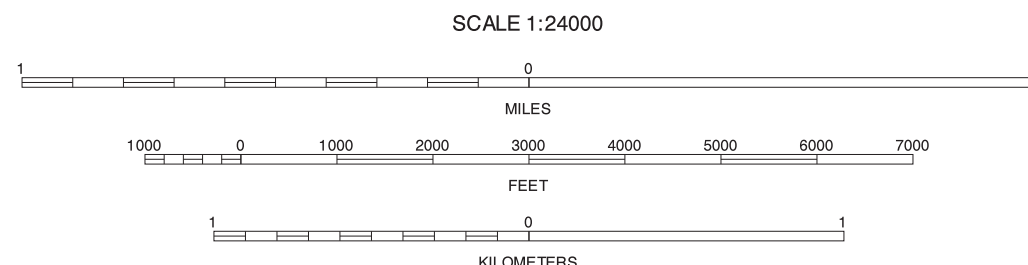
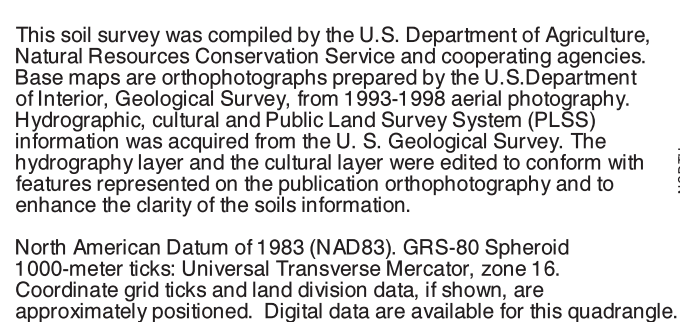
5	6	A
11	13	
19	20	21

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TULA, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 12 OF 44

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

GOGEBIC COUNTY, MICHIGAN
MERRIWEATHER QUADRANGLE
SHEET NUMBER 13 OF 44



6	A	B	6 UNDERWOOD HILL
12		14	A ALDRIDGE CREEK
20	21	22	B BERGLAND NE
			12 TULA
			14 BERGLAND
			20 WAKEFIELD NE
			21 MARENISCO
			22 MARSHALL CREEK

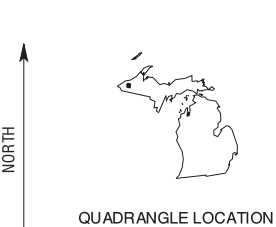
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Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

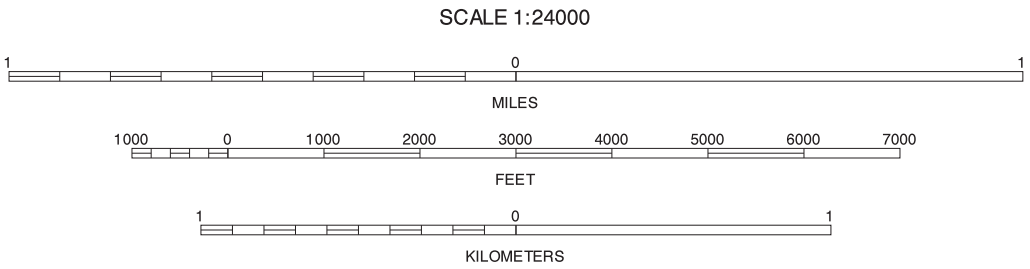


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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION



A	B	C
13	15	21
21	22	23

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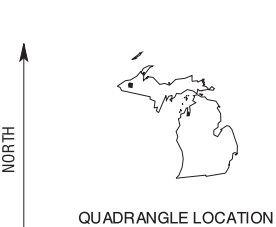
BERGLAND, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 14 OF 44

Soil map delineations extending beyond the dashed white quadrangle neartine are for reference only and are included on adjacent map sheets.

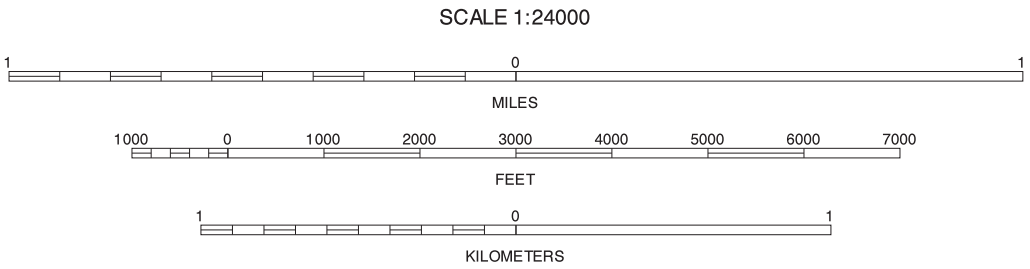


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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION

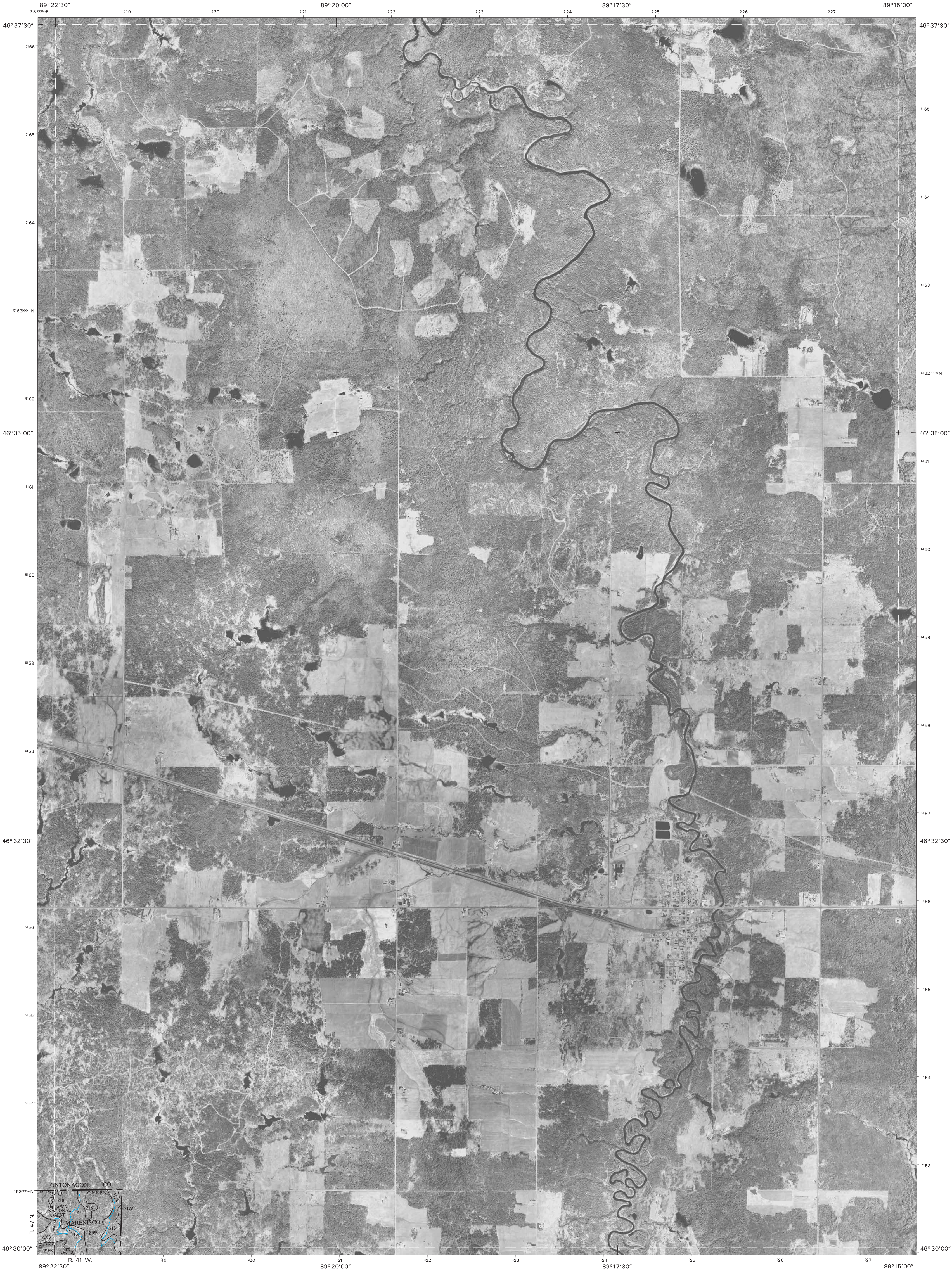


A	B	C
14	16	
22	23	24

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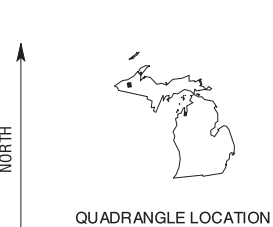
MATCHWOOD, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 15 OF 44

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

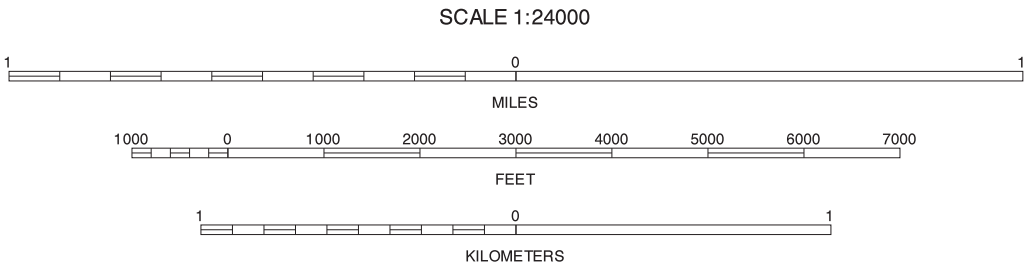


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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION



A	B	C
15		D
23	24	E

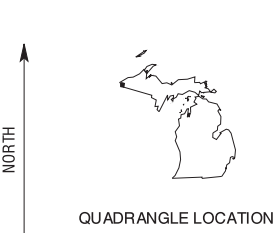
EWEN, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 16 OF 44

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

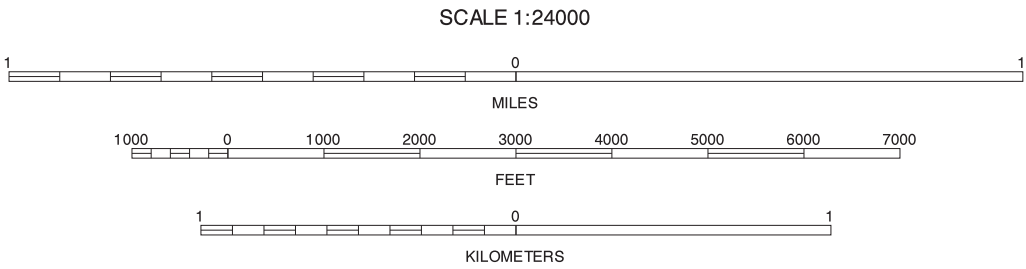


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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION

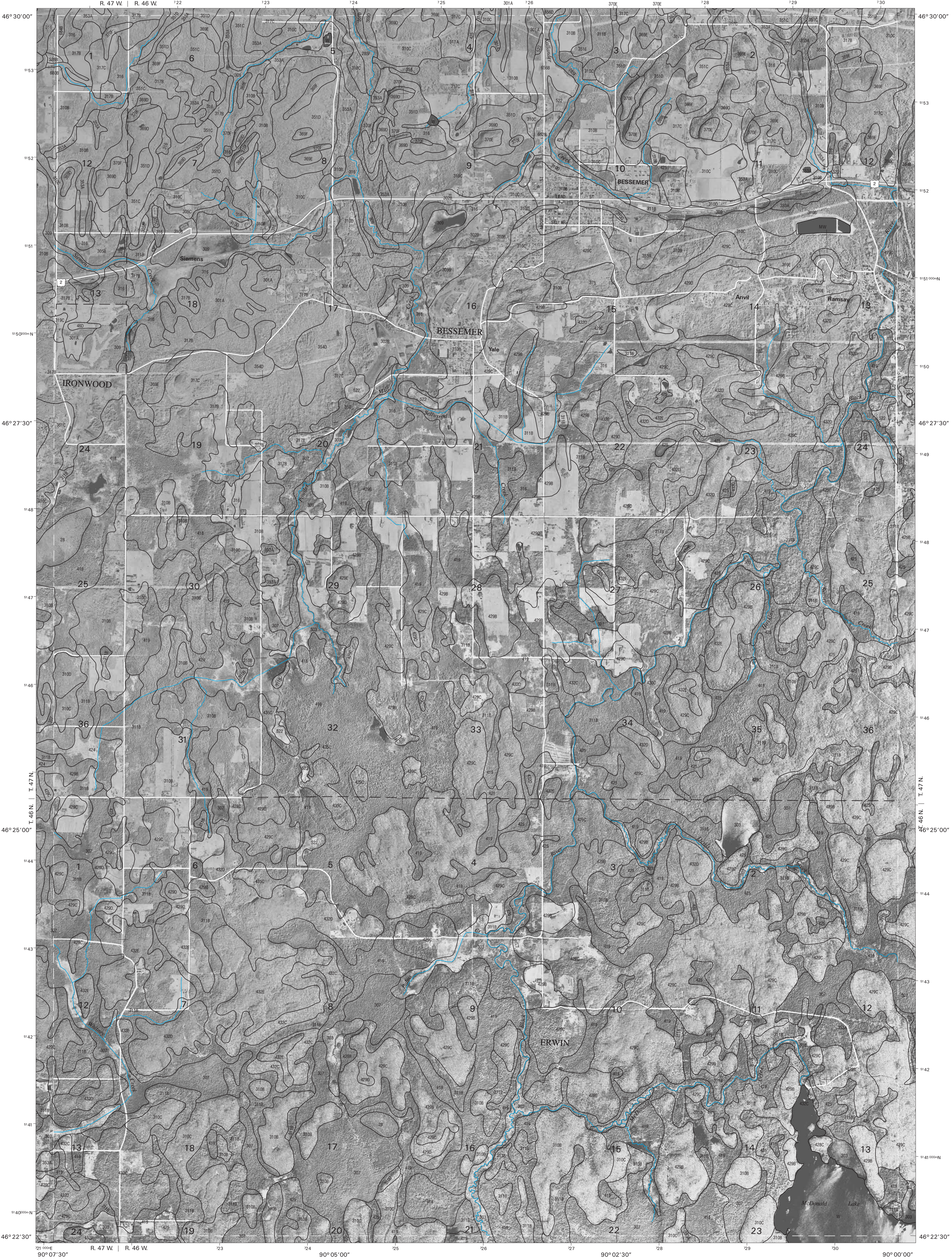


8	9	10
A		18
B	25	26

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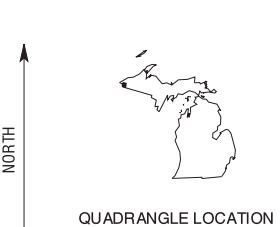
IRONWOOD, MICHIGAN
7.5 MINUTE SERIES
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Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

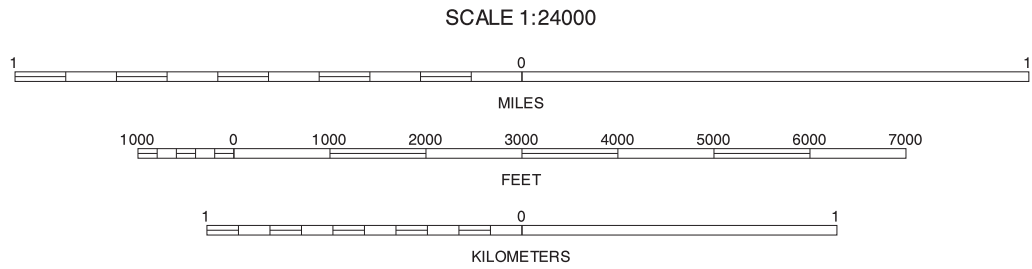


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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 18.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION

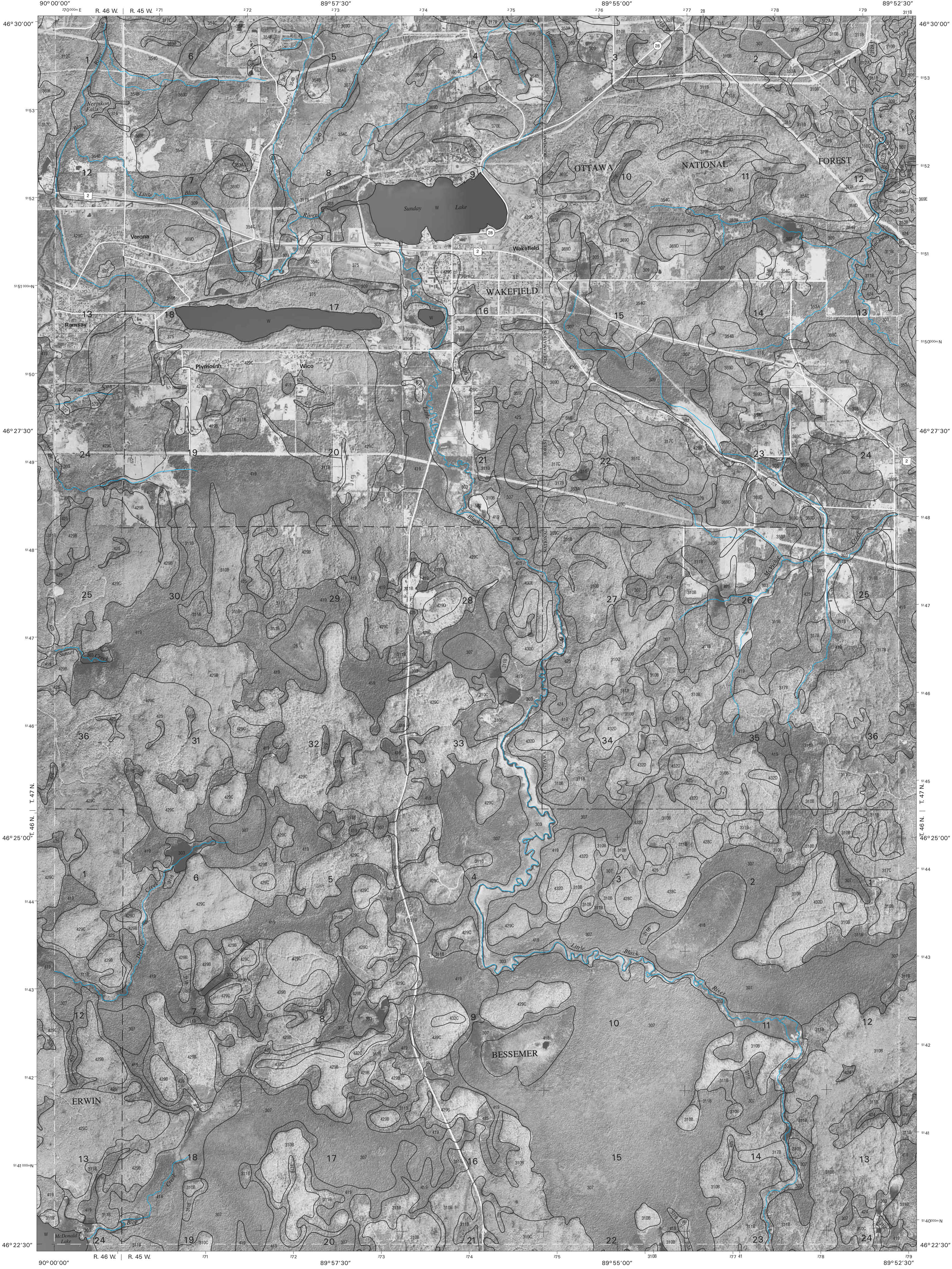


9	10	11
17	18	19
25	26	27

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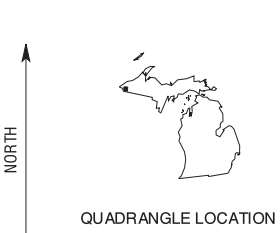
BESSEMER, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 18 OF 44

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

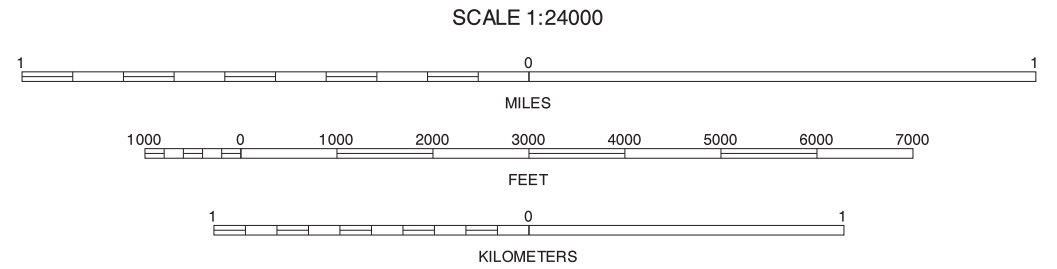


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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



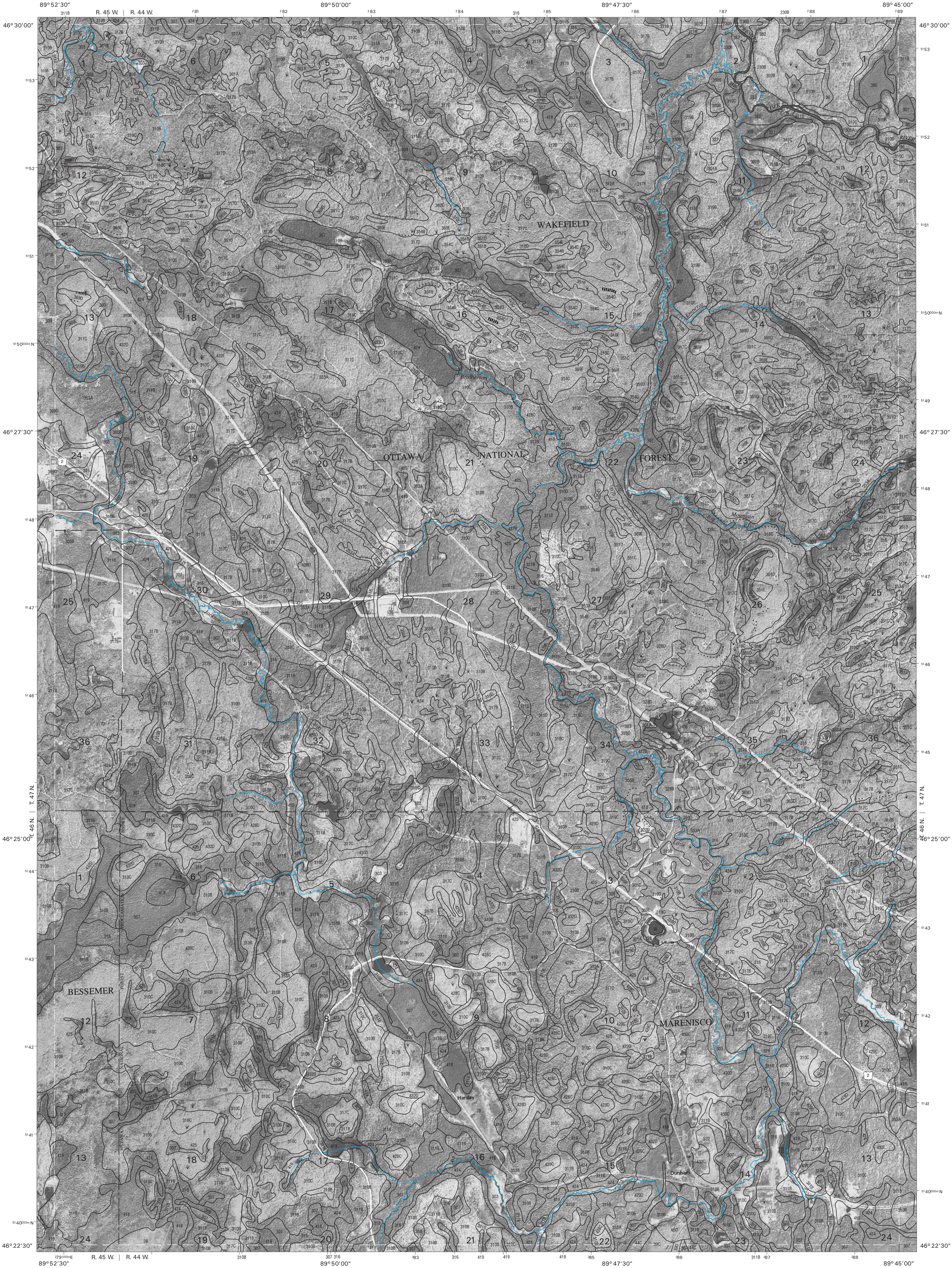
QUADRANGLE LOCATION



10	11	12	10 COPPER PEAK
			11 THOMASTON
			12 TULA
			18 BESSEMER
18		20	20 WAKEFIELD NE
			26 LAKE EVELYN
			27 CHANEY LAKE
26	27	28	28 HARRIS LAKE
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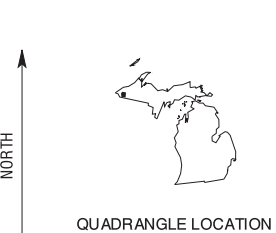
WAKEFIELD, MICHIGAN
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Soil map delineations extending beyond the dashed white quadrangle neoline are for reference only and are included on adjacent map sheets.

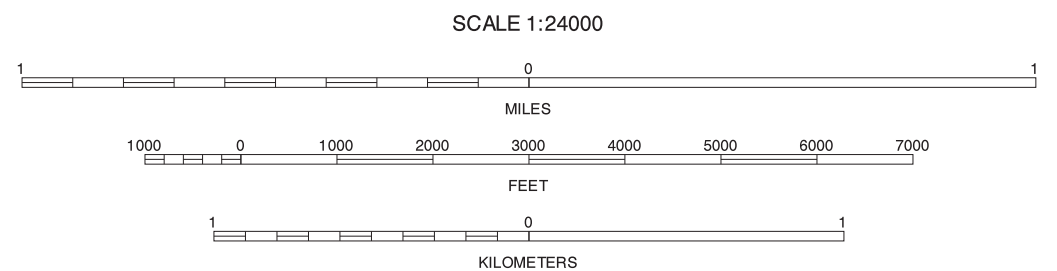


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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION

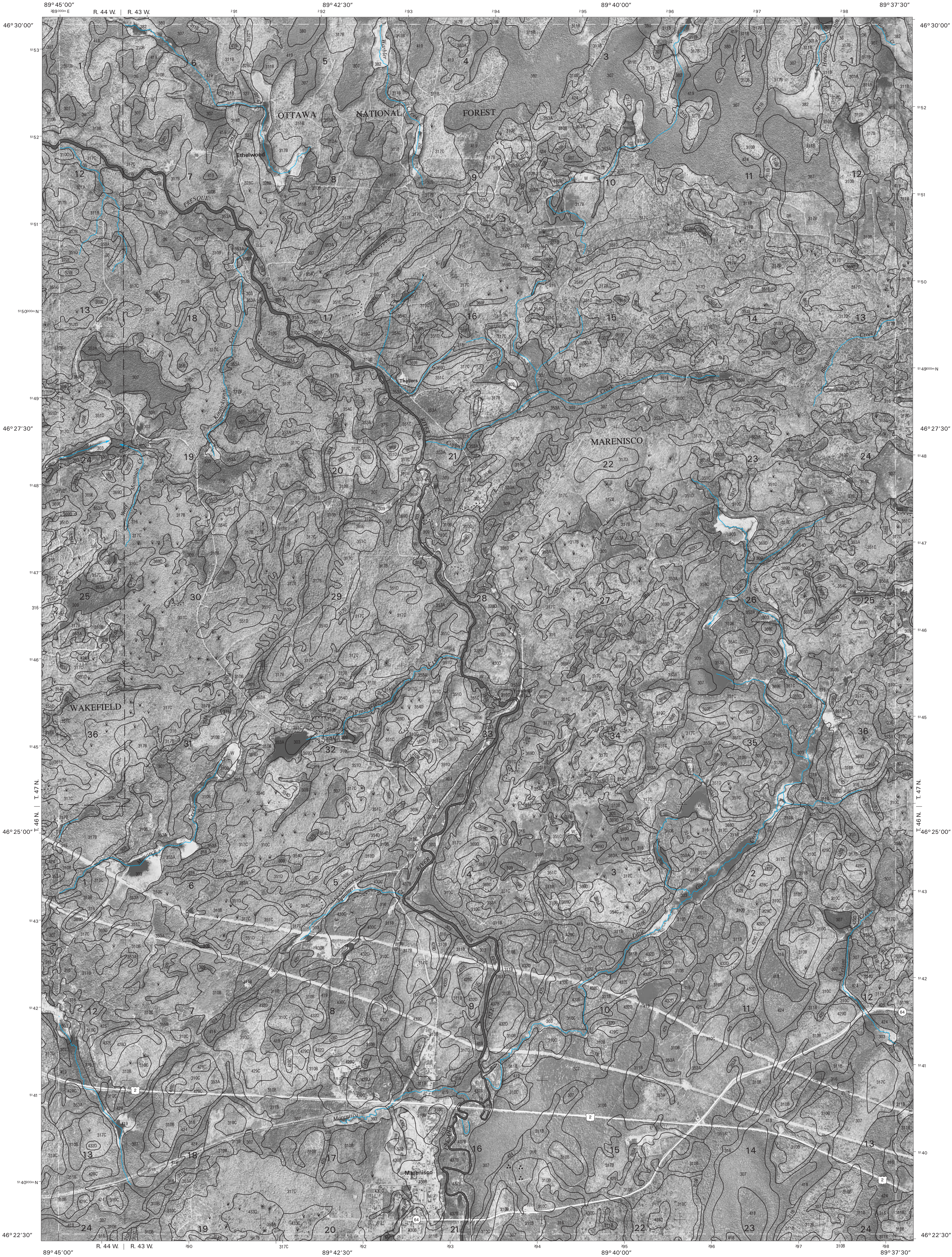


11	12	13	11 THOMASTON
			12 TULA
			13 MERRIWEATHER
19		21	19 WAKEFIELD
			21 MARENISCO
			27 CHANEY LAKE
			28 HARRIS LAKE
27	28	29	29 STATELINE LAKE

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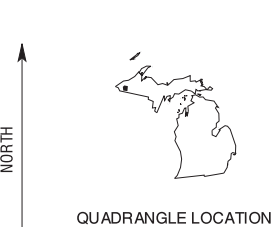
WAKEFIELD NE, MICHIGAN
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Soil map delineations extending beyond the dashed white quadrangle neartine are for reference only and are included on adjacent map sheets.

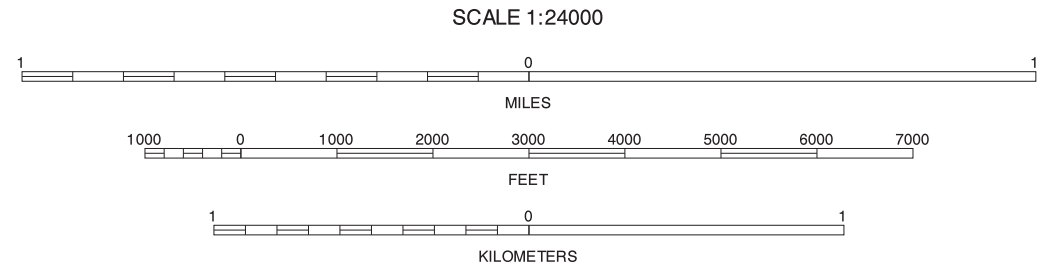


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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION

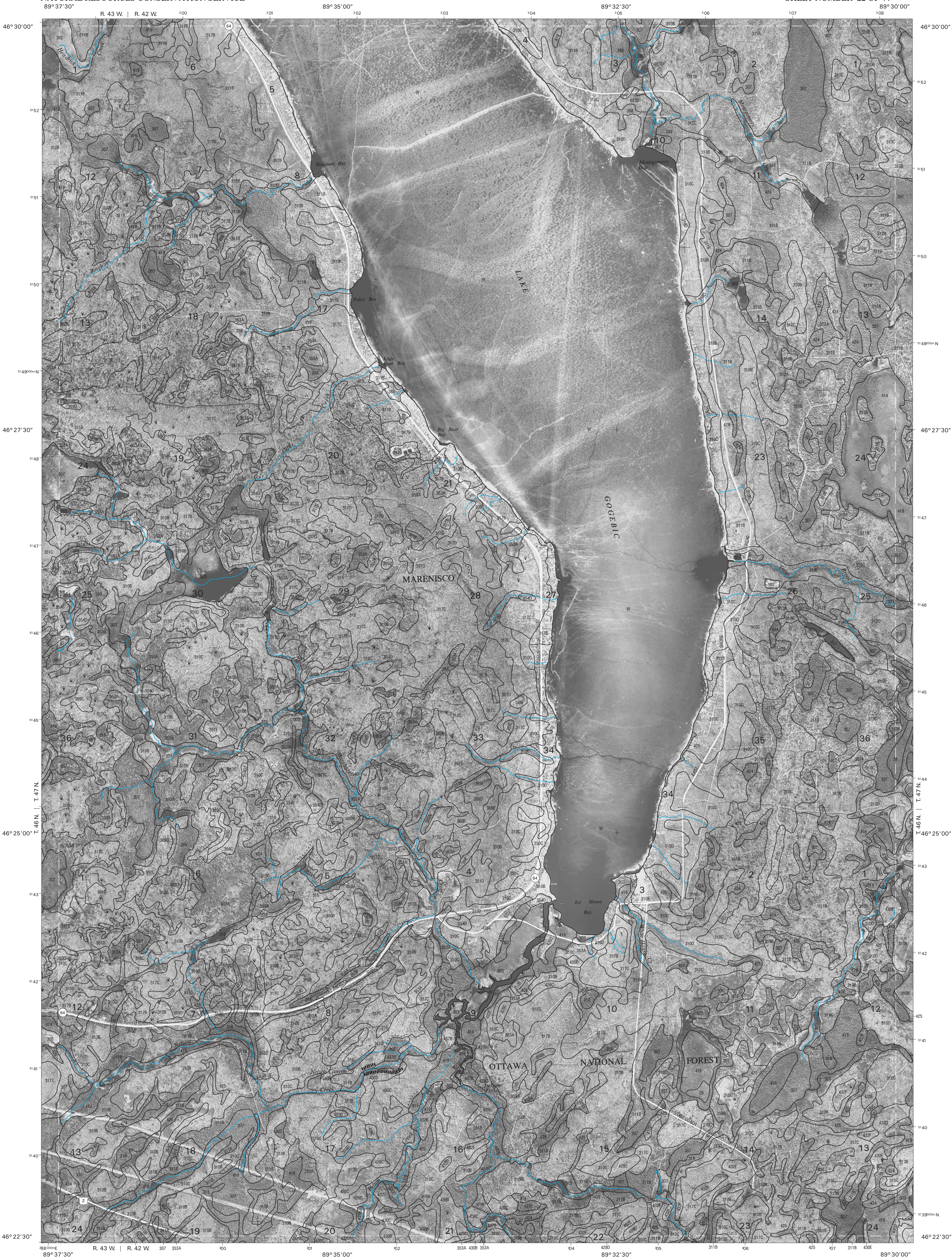


12	13	14	12 TULA
			13 MERRINWEATHER
			14 BERGLAND
20		22	22 WAKEFIELD NE
			28 MARSHALL CREEK
			29 HARRIS LAKE
28	29	30	29 STATELINE LAKE
			30 GOGEBIC

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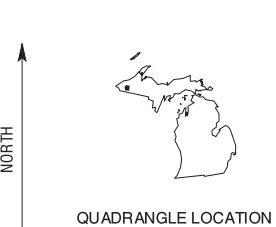
MARENISCO, MICHIGAN
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Soil map delineations extending beyond the dashed white quadrangle neartine are for reference only and are included on adjacent map sheets.

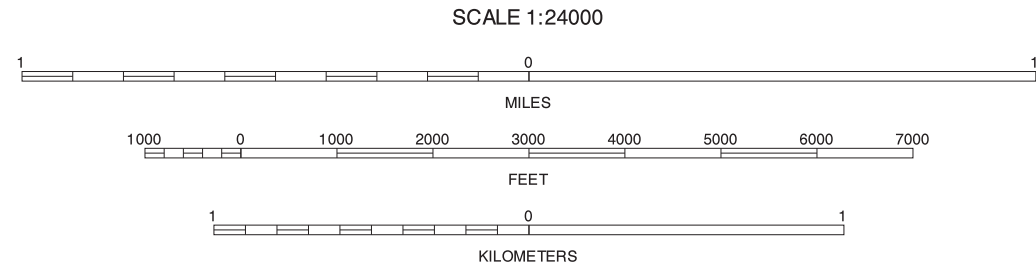


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1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION



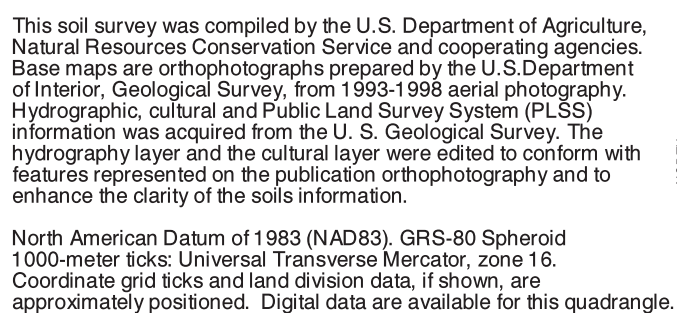
13	14	15
21	22	23
29	30	31

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MARSHALL CREEK, MICHIGAN
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Soil map delineations extending beyond the dashed white quadrangle neartine are for reference only and are included on adjacent map sheets.

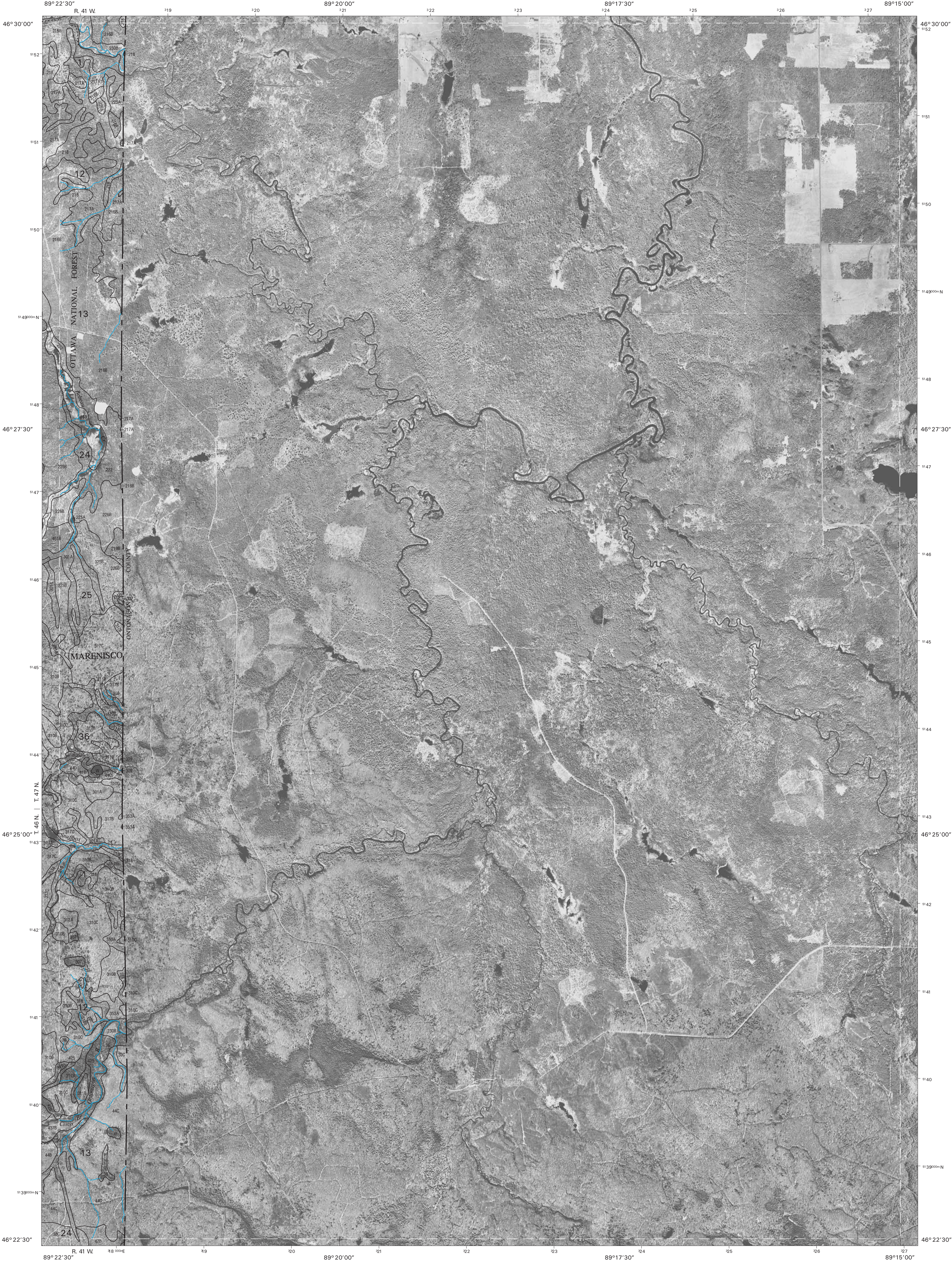
GOGEBIC COUNTY, MICHIGAN
CUP LAKE QUADRANGLE
SHEET NUMBER 23 OF 44



14	15	16	14 BERGLAND 15 MATCHWOOD
22		24	16 EWEN 22 MARSHALL CREEK 24 CHOATE
30	31	32	30 GOGEBIC 31 THAYER 32 BEATON

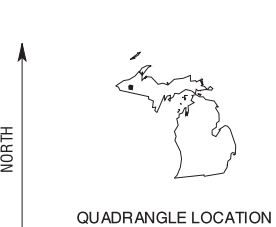
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Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

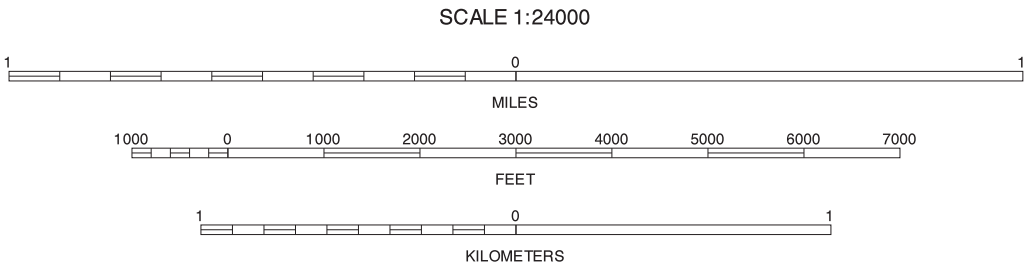


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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION

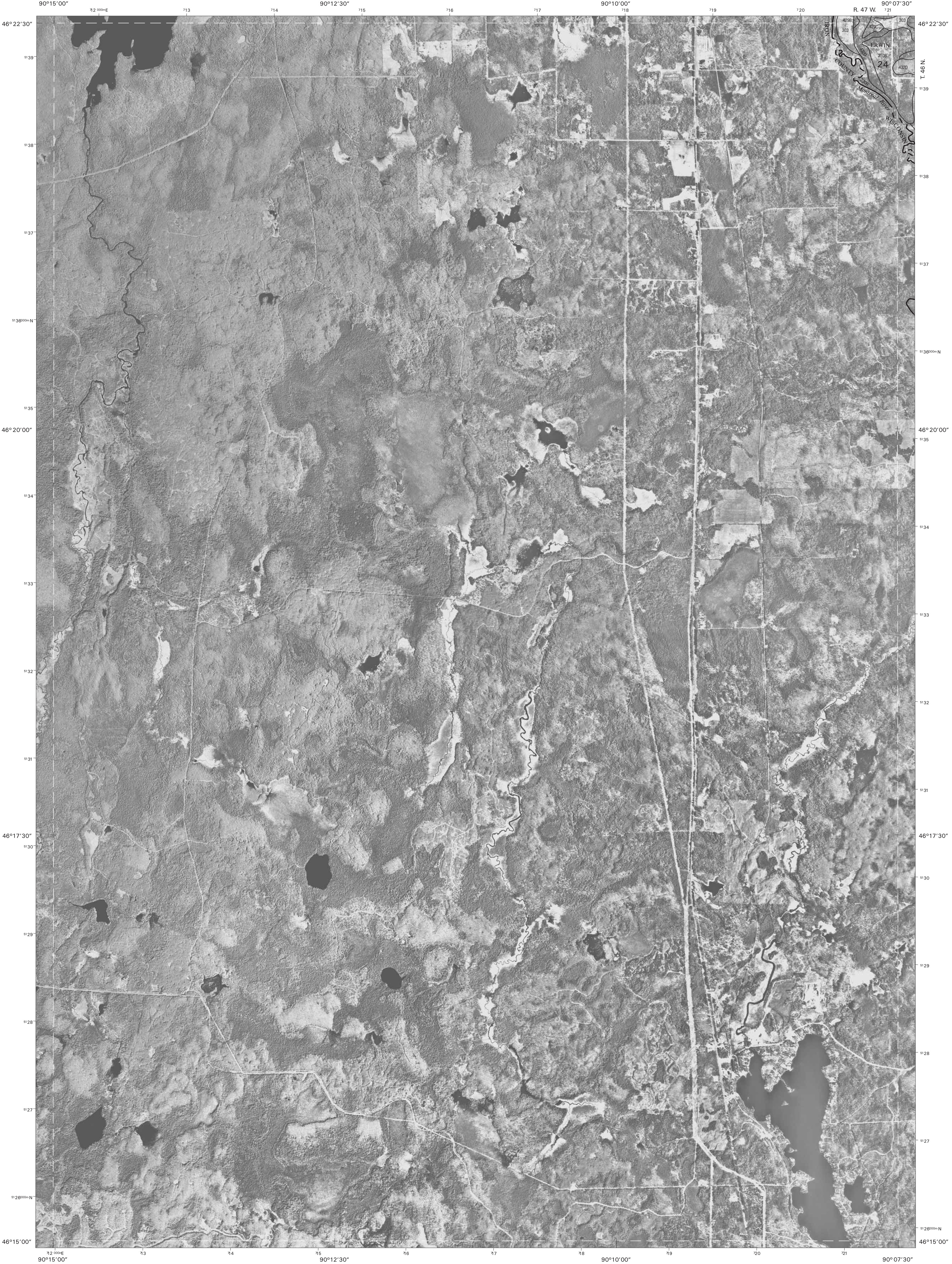


15	16	A	15 MATCHWOOD
		A	16 BROWN
		A	BRUCE CROSSING
23		B	23 CUP LAKE
		B	PAULDING
		B	THAYER
31	32	33	32 BEATON
		33	WATERSMEET

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CHOATE, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 24 OF 44

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

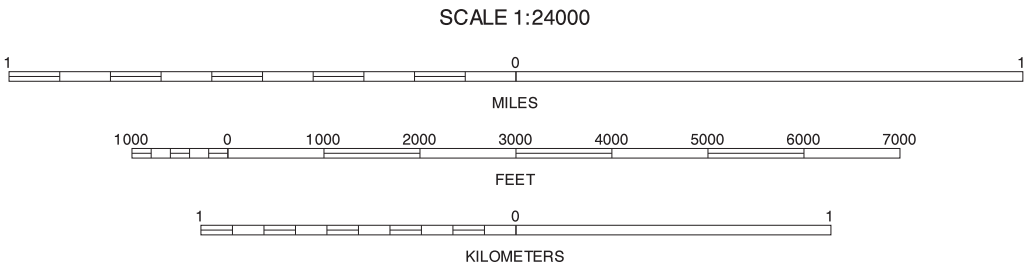


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1000-meter ticks: Universal Transverse Mercator, zone 16.
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QUADRANGLE LOCATION



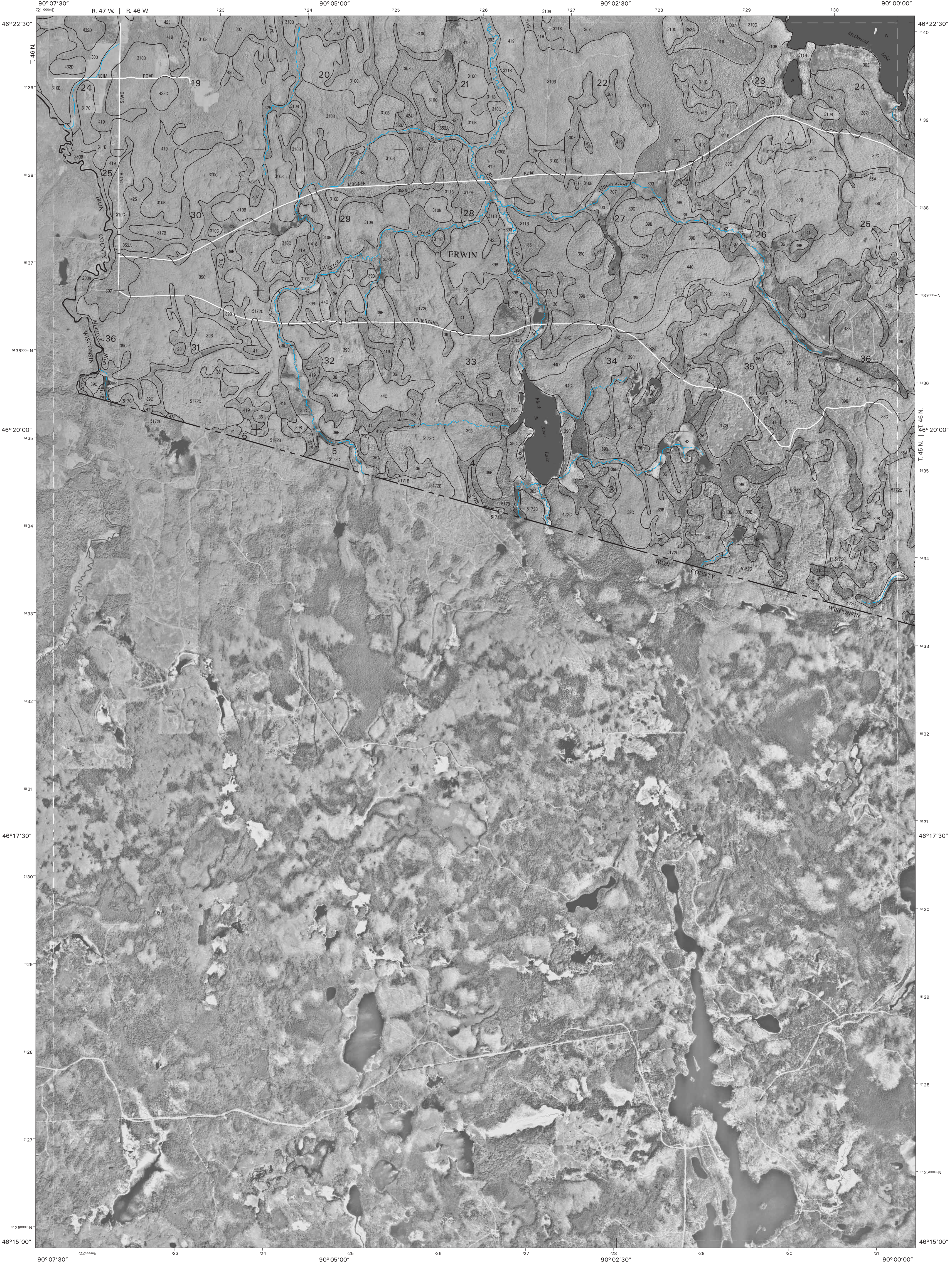
A	17	18
B		26
C	D	E

A IRON BELT
17 IRONWOOD
18 BESSEMER
B TURNABLE CREEK
26 LAKE EVELYN
C LAKE SIX
D LAKE OF THE FALLS
E MERCER

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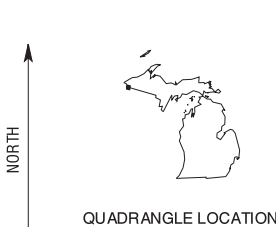
PINE LAKE, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 25 OF 44

Soil map delineations extending beyond the dashed white quadrangle neartline are for reference only and are included on adjacent map sheets.

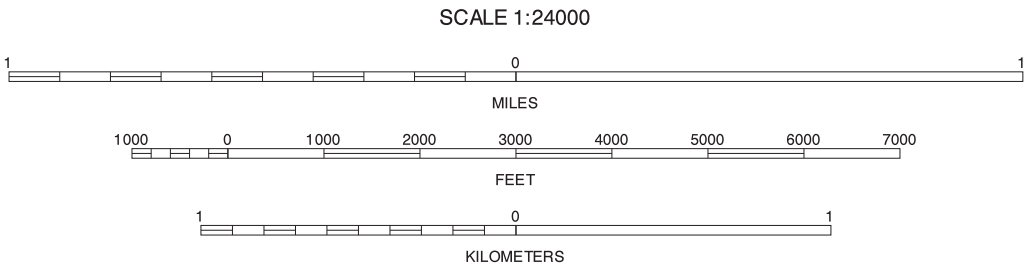


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QUADRANGLE LOCATION

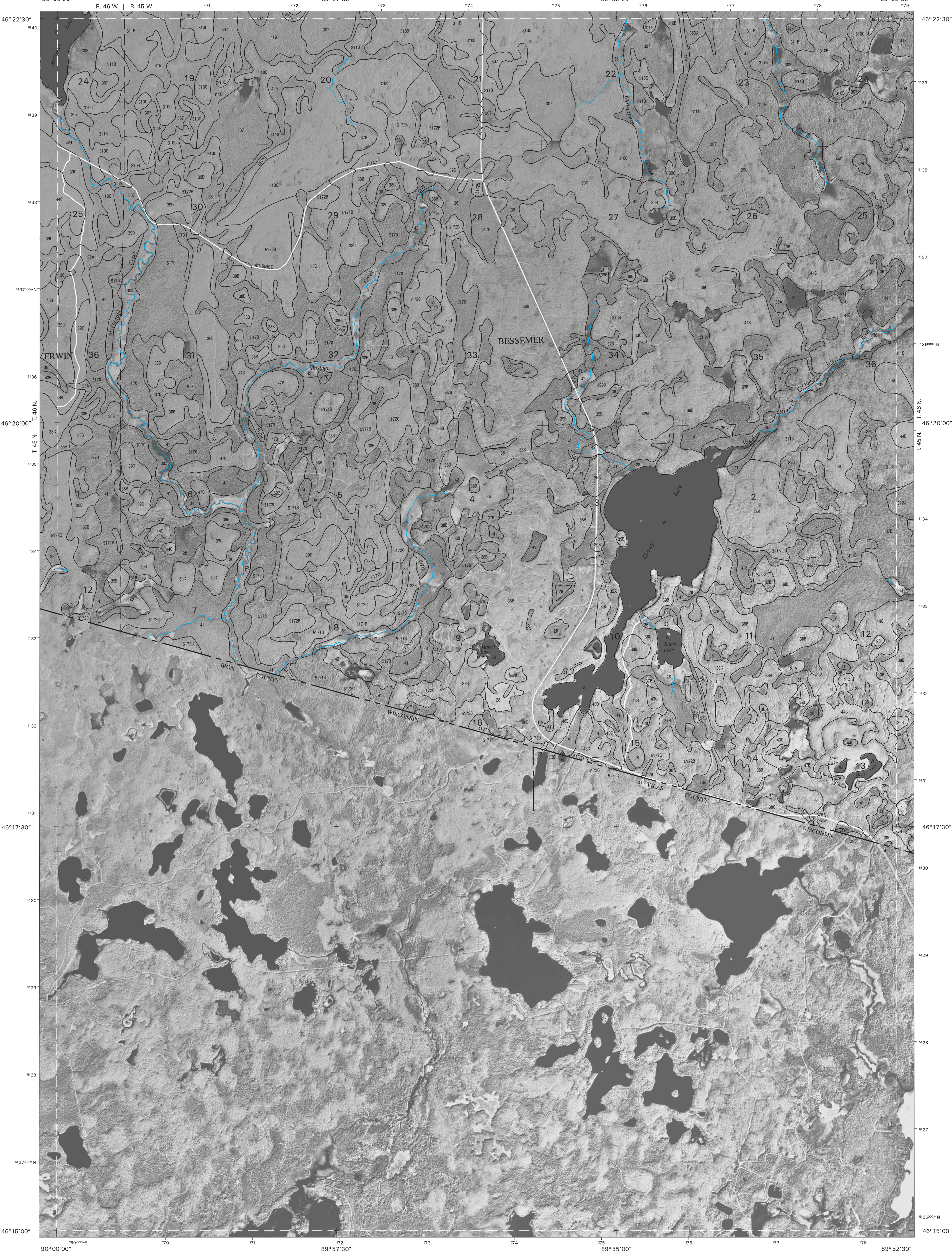


17	18	19	17 IRONWOOD 18 BEESMEYER 19 WAKEFIELD
25		27	25 PINE LAKE 27 CHANEY LAKE
A	B	C	A LAKE OF THE FALLS B MERCER C WINCHESTER

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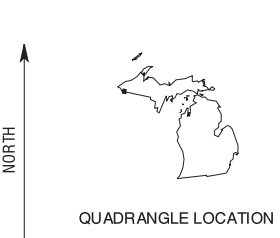
LAKE EVELYN, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 26 OF 44

Soil map delineations extending beyond the dashed white quadrangle neartline are for reference only and are included on adjacent map sheets.

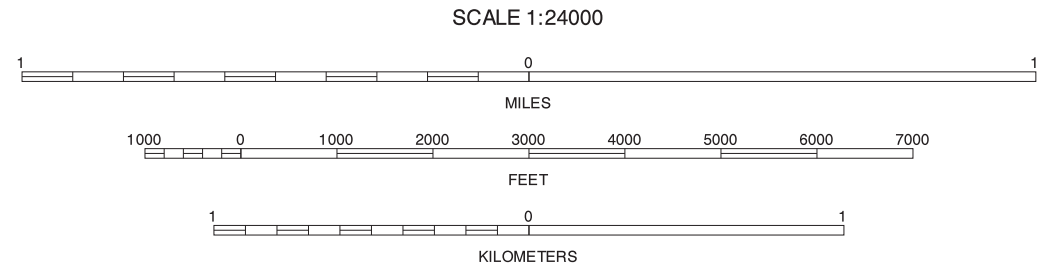


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QUADRANGLE LOCATION

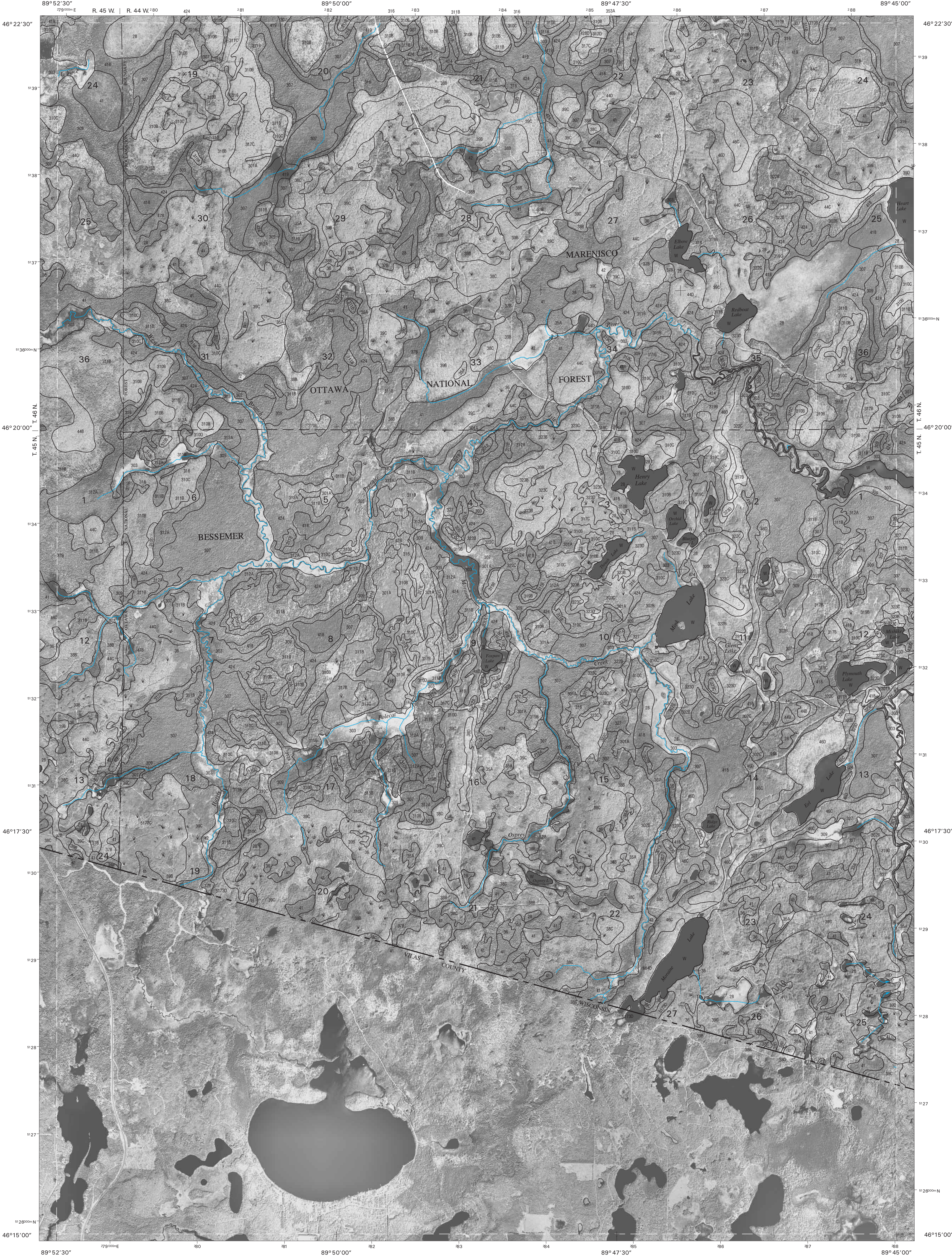


18	19	20	18 BESSEMER
26		28	19 WAKEFIELD
A	B	C	20 WAKEFIELD NE
			28 LAKE EVELYN
			A MERCER
			B WINCHESTER
			C PAPOOSE LAKE

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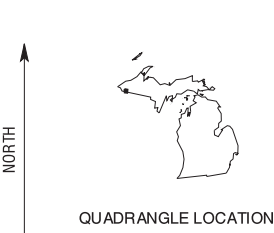
CHANEY LAKE, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 27 OF 44

Soil map delineations extending beyond the dashed white quadrangle neoline are for reference only and are included on adjacent map sheets.

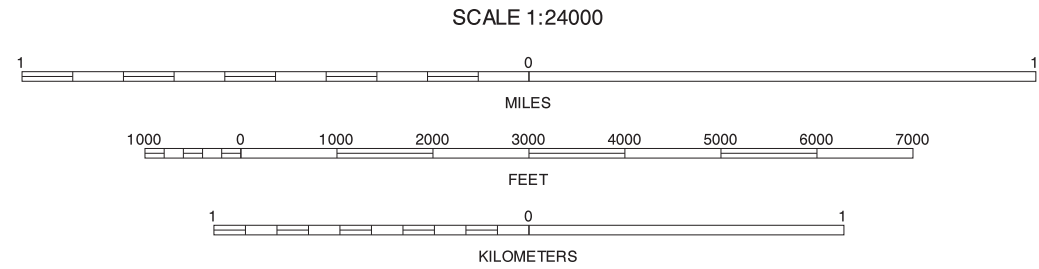


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QUADRANGLE LOCATION

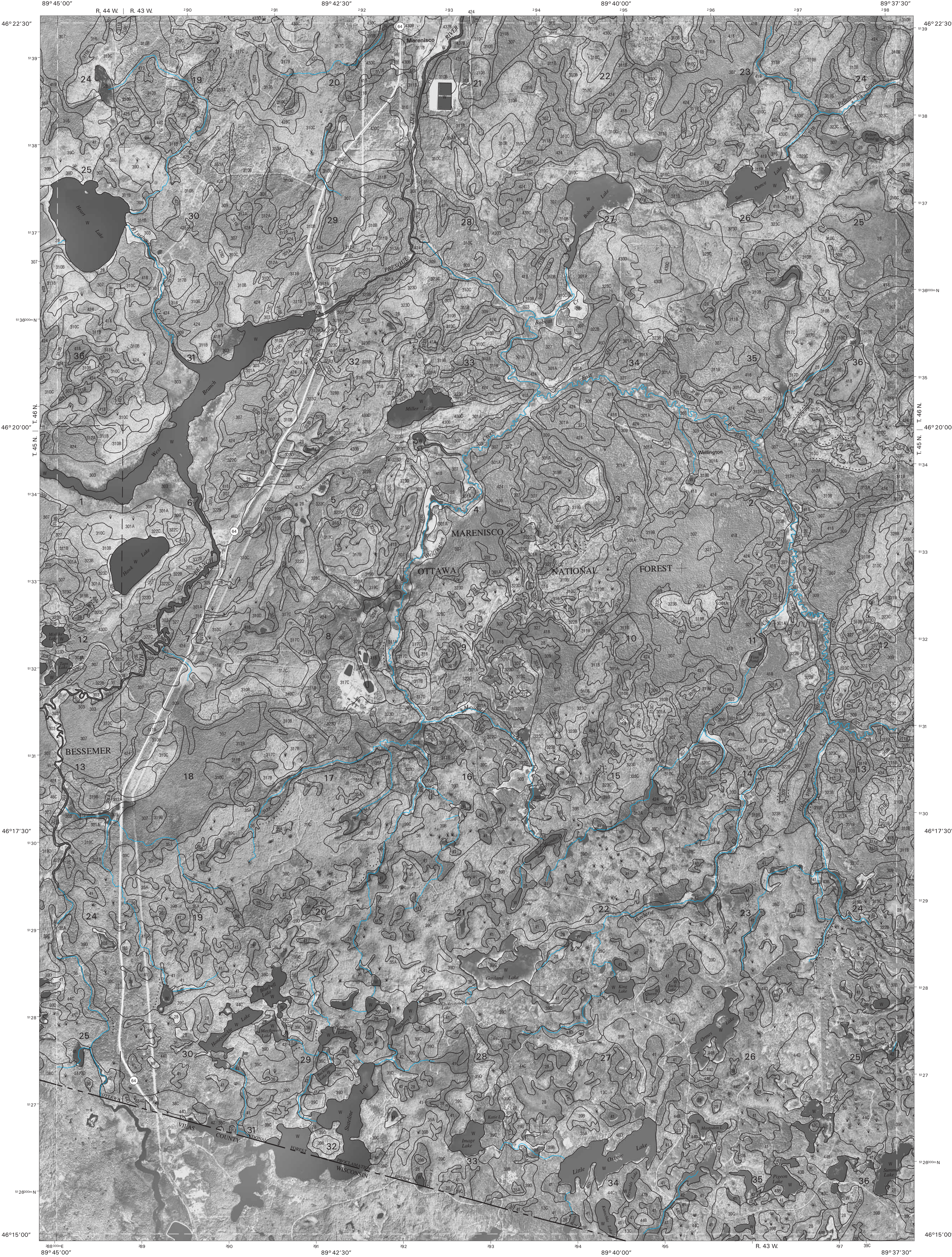


19	20	21	19 WAKEFIELD
			20 WAKEFIELD NE
			21 MARENISCO
27		29	27 CHANEY LAKE
			29 STATELINE LAKE
A	B	36	A WINCHESTER
			B PAPOOSE LAKE
			36 PRESQUE ISLE

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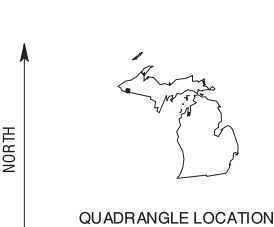
HARRIS LAKE, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 28 OF 44

Soil map delineations extending beyond the dashed white quadrangle nealtine are for reference only and are included on adjacent map sheets.

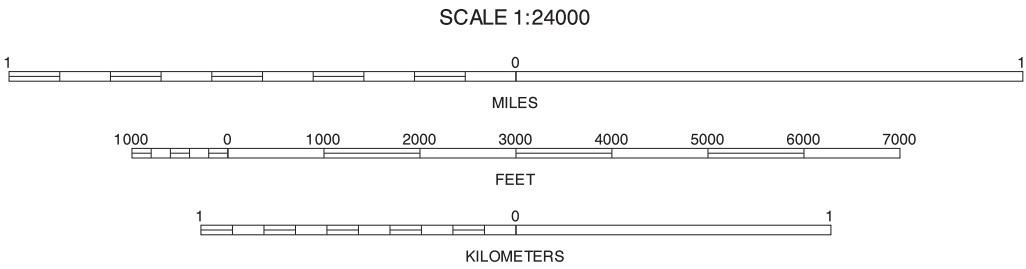


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QUADRANGLE LOCATION

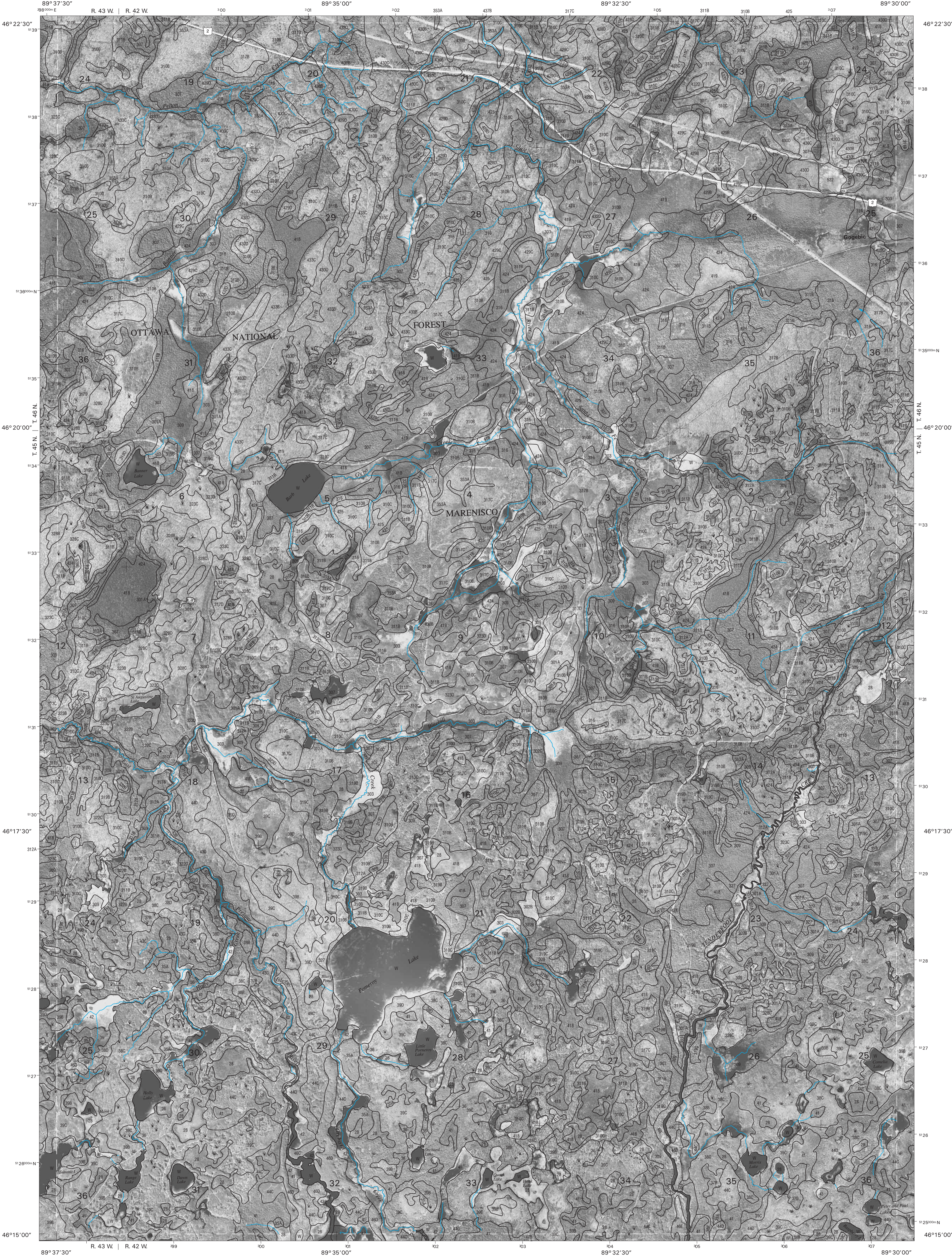


20	21	22	20 WAKEFIELD NE
28		30	21 MARENISCO
A	36	37	22 MARSHALL CREEK
			28 HARRIS LAKE
			30 GOGEBIC
			A PAPOOSE LAKE
			36 PRESQUE ISLE
			37 TENDERFOOT LAKE

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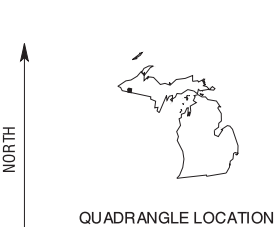
STATELINE LAKE, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 29 OF 44

Soil map delineations extending beyond the dashed white quadrangle nealtine are for reference only and are included on adjacent map sheets.

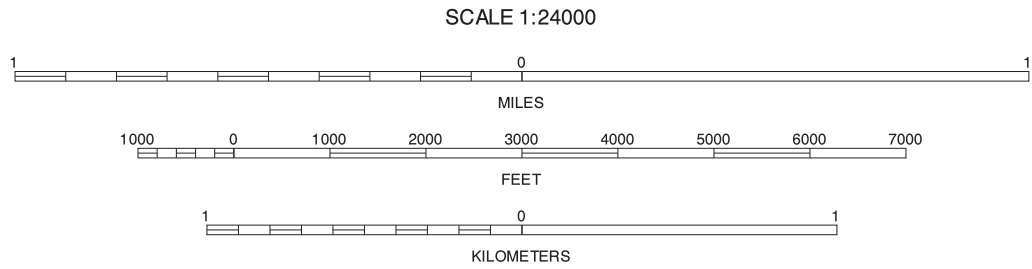


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QUADRANGLE LOCATION

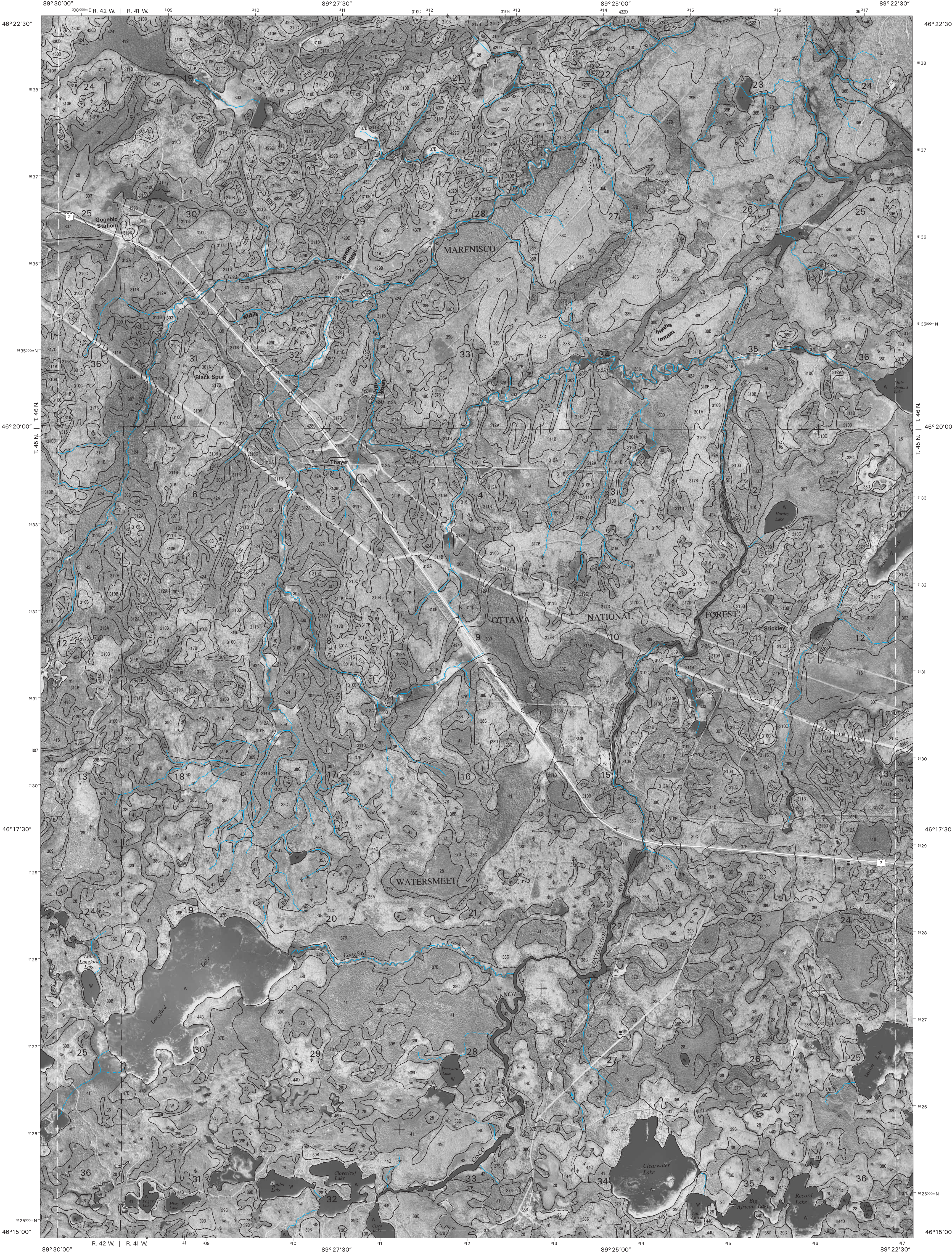


21	22	23	21 MARENISCO
			22 MARSHALL CREEK
			23 CUP LAKE
29		31	29 STAGLINE LAKE
			31 THAYER
			36 PRESQUE ISLE
36	37	38	37 TENDERFOOT LAKE
			38 THOUSAND ISLAND LAKE

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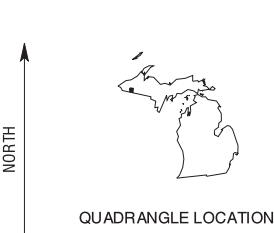
GOGEBIC, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 30 OF 44

Soil map delineations extending beyond the dashed white quadrangle neeline are for reference only and are included on adjacent map sheets.

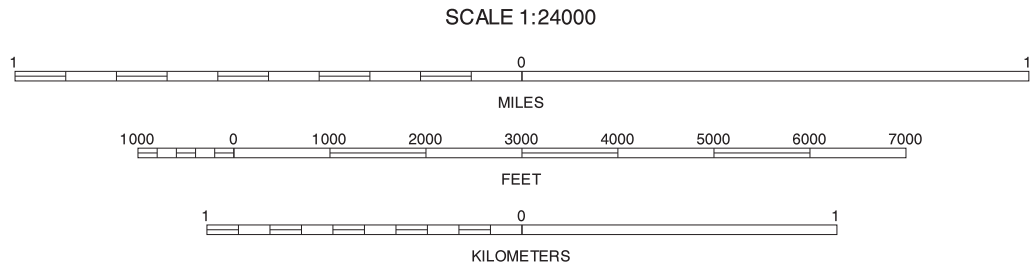


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QUADRANGLE LOCATION

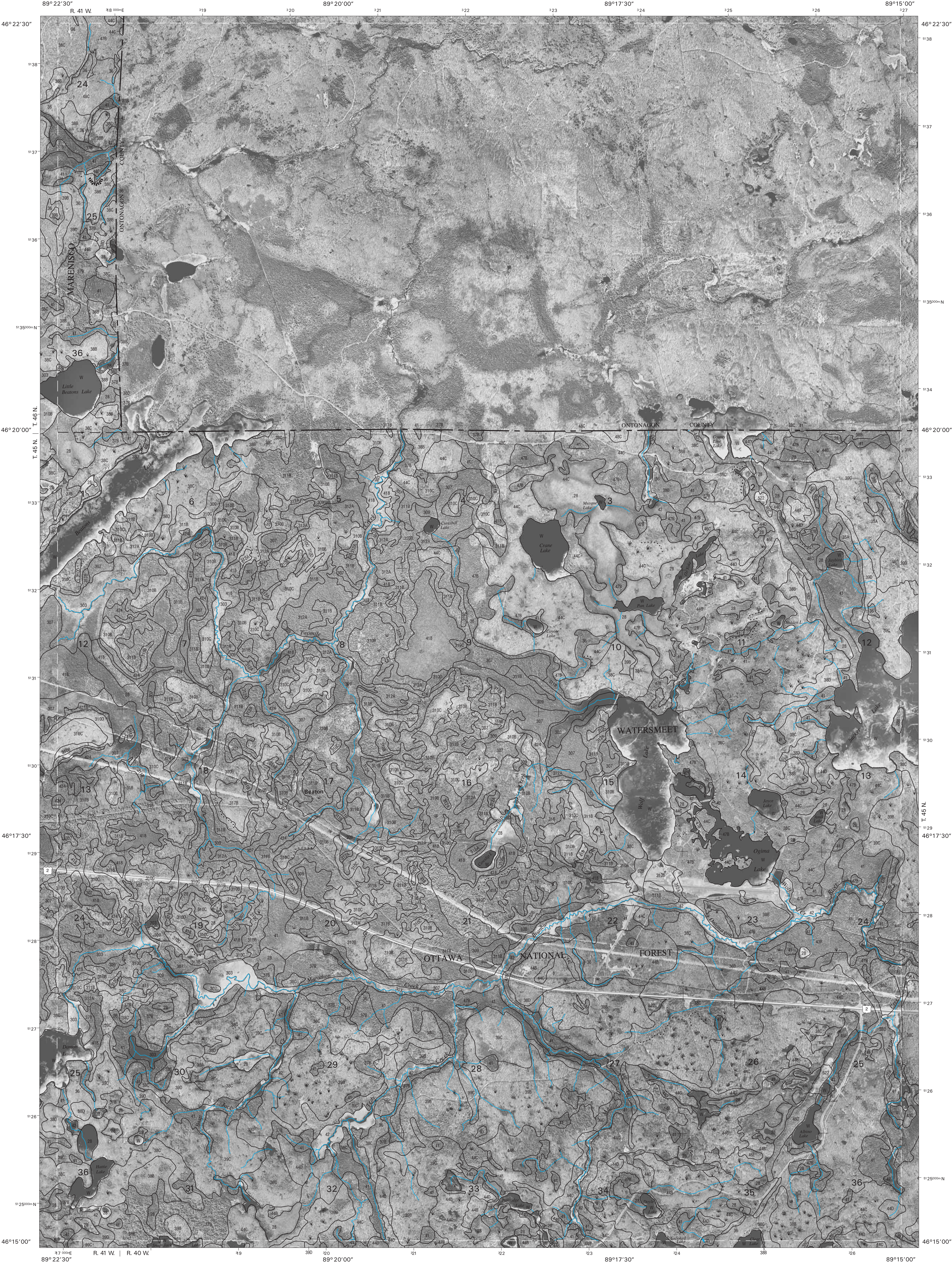


22	23	24	22 MARSHALL CREEK
23			23 CUP LAKE
24			24 CHATEAU
30		32	30 GOGEBIC
			32 BEATON
37	38	39	37 TENDERFOOT LAKE
			38 THOUSAND ISLAND LAKE
			39 BLACK OAK LAKE

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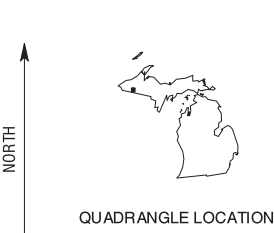
THAYER, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 31 OF 44

Soil map delineations extending beyond the dashed white quadrangle neoline are for reference only and are included on adjacent map sheets.

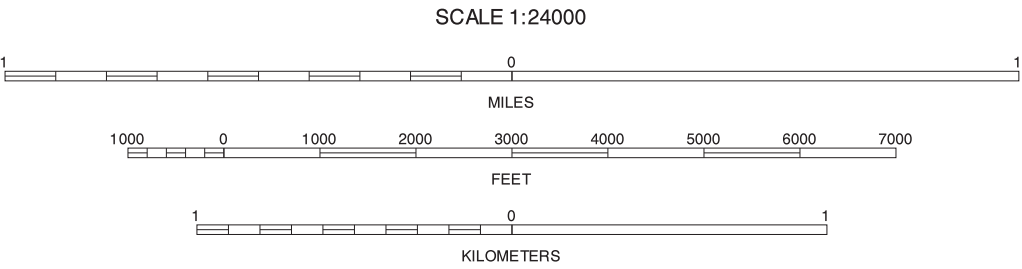


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QUADRANGLE LOCATION

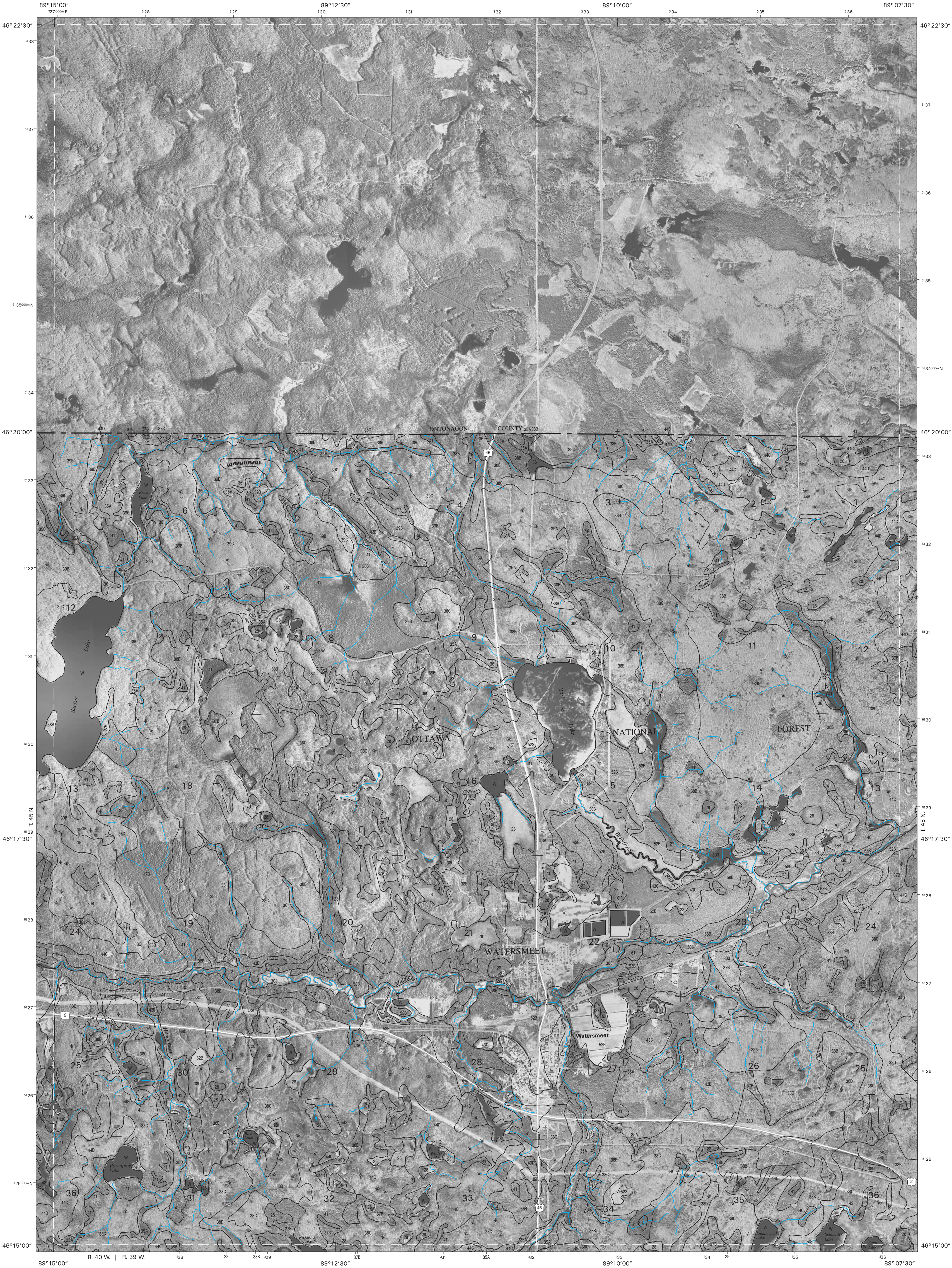


23	24	A	23 CUP LAKE
31	33		24 CHOCATE
38	39	40	A PAULING
			31 THAYER
			33 WATERSMEET
			36 THOUSAND ISLAND LAKE
			39 BLACK OAK LAKE
			40 LAND O'LAKE

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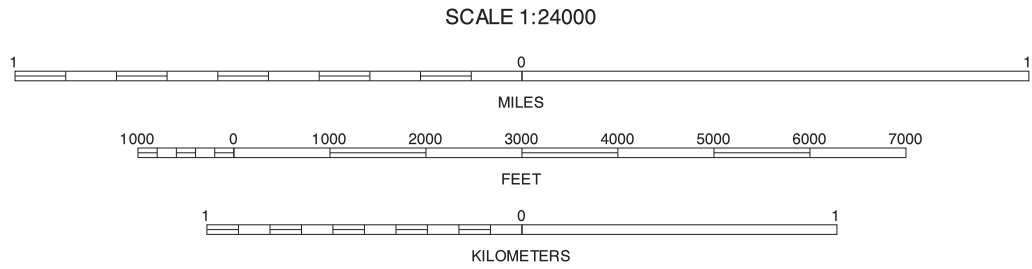
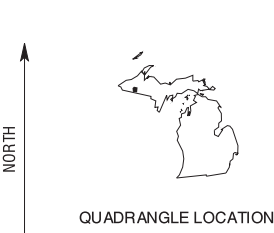
BEATON, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 32 OF 44

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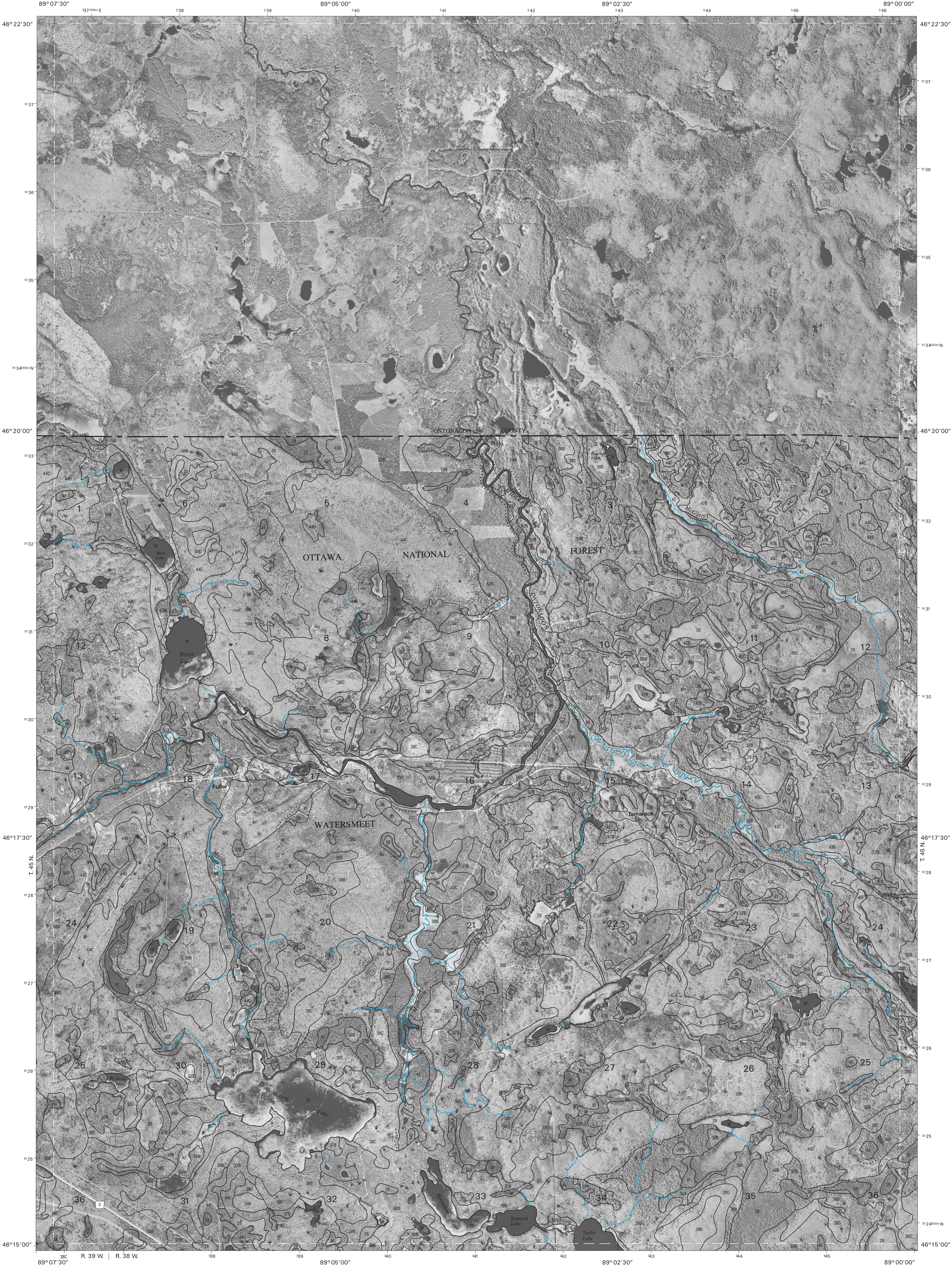
North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



24	A	B	24 CHOATE
32		34	A PAULDING
39	40	41	B TROUT CREEK
			32 BEATON
			34 FULLER
			39 BLACK OAK LAKE
			40 LAND OLAKES
			41 IMP LAKE

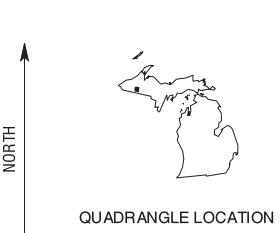
WATERSMEET, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 33 OF 44

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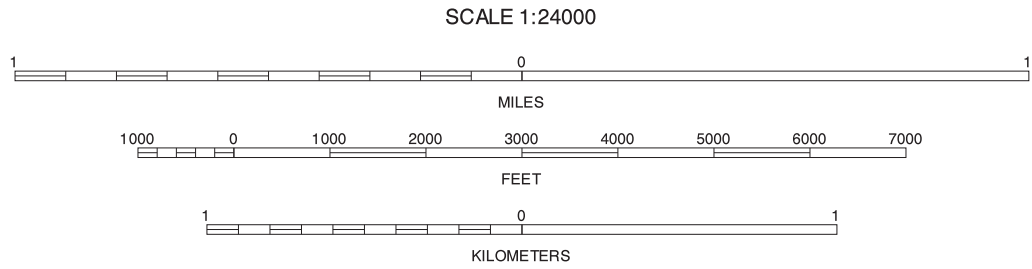


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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION

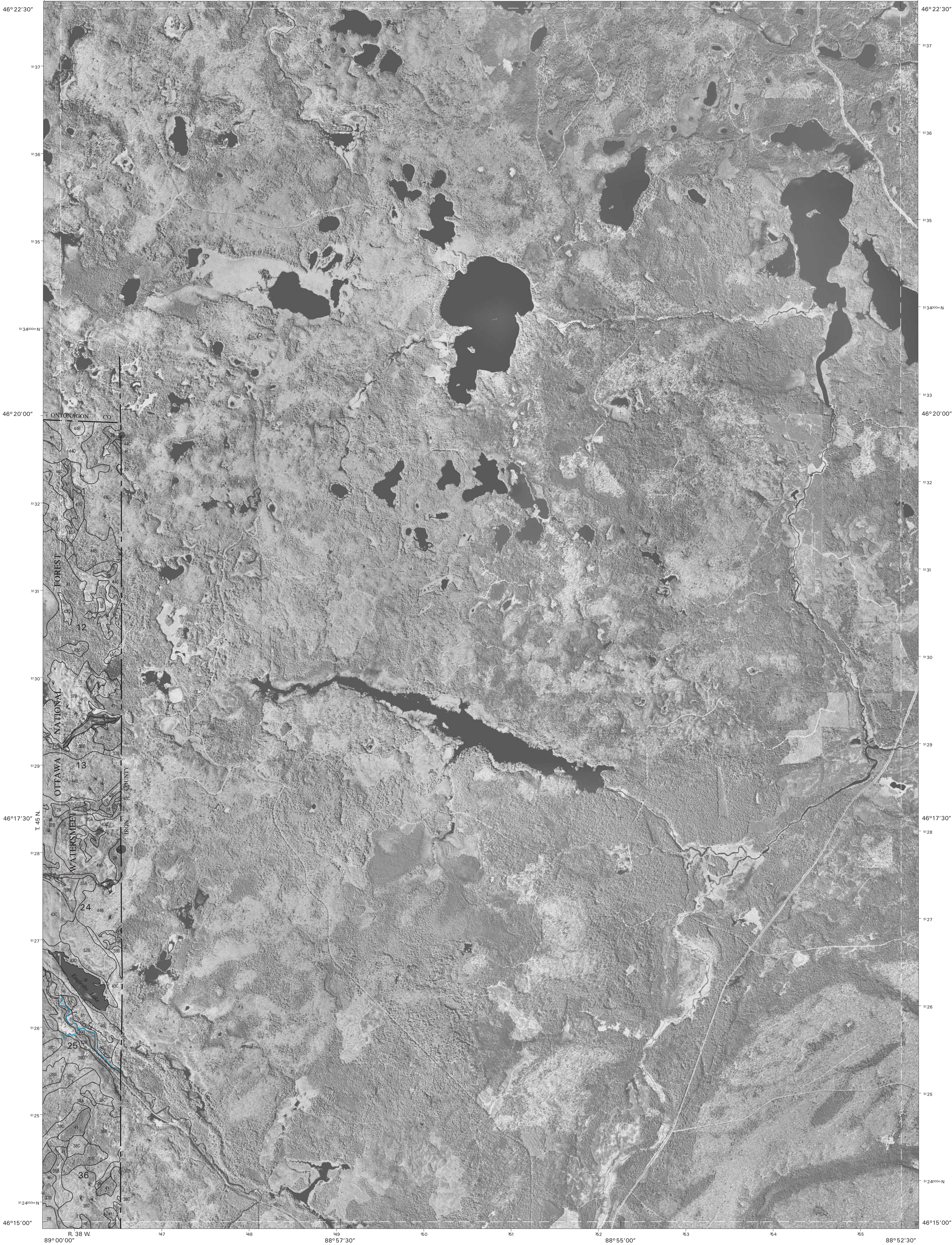


A	B	C
33	34	35
40	41	42

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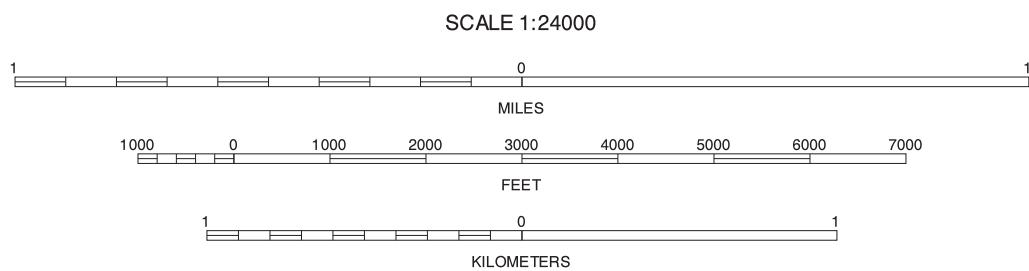
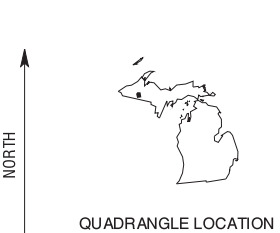
FULLER, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 34 OF 44

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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

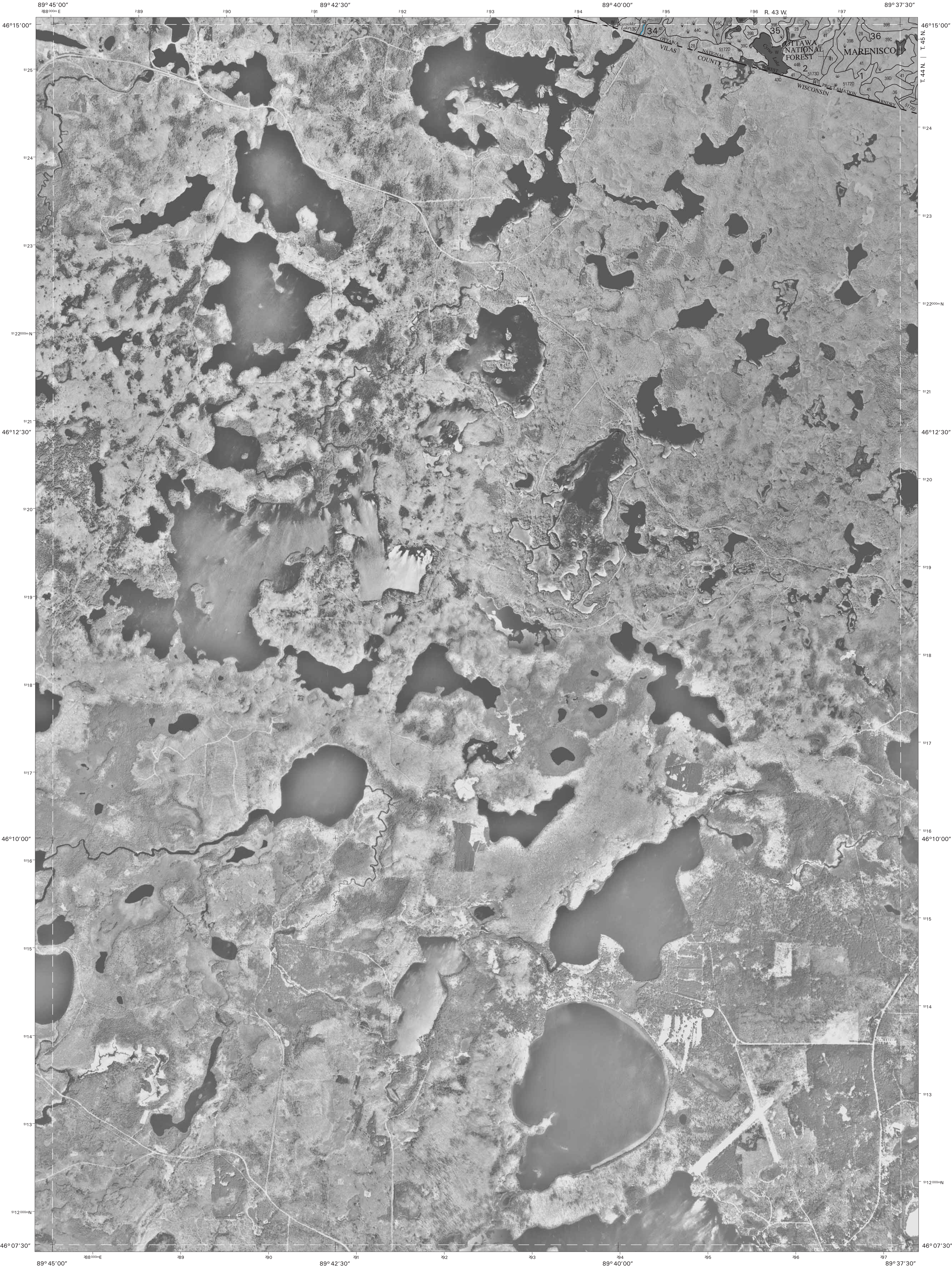


A	B	C
34		D
41	42	E

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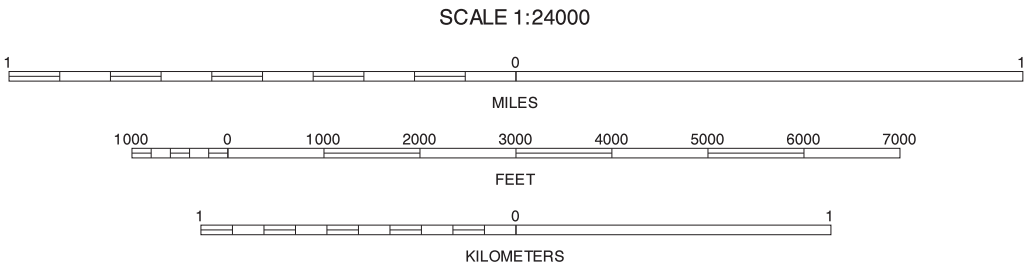
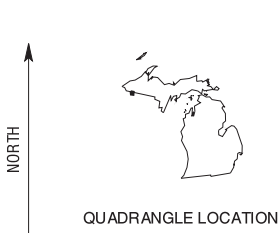
LAKE MITIGWAKI, MICHIGAN
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SHEET NUMBER 35 OF 44

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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
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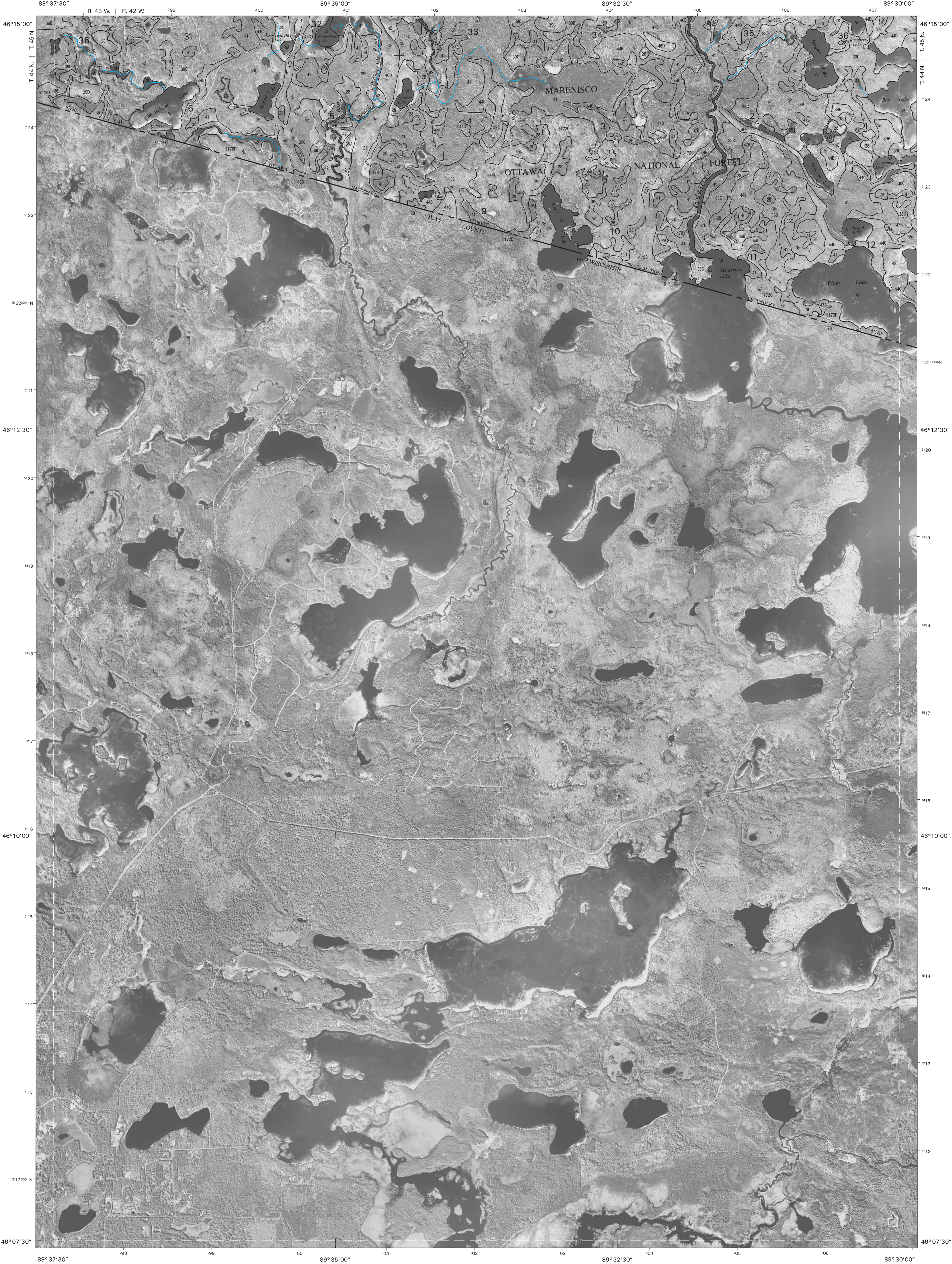


28	29	30	28 HARRIS LAKE
			29 STARLINE LAKE
			30 GOGEBIC
A		37	A PAPOOSE LAKE
			37 TENDERFOOT LAKE
			B MANTONISH LAKE
B	C	D	C BOULDER LINCION
			D WHITE SAND LAKE

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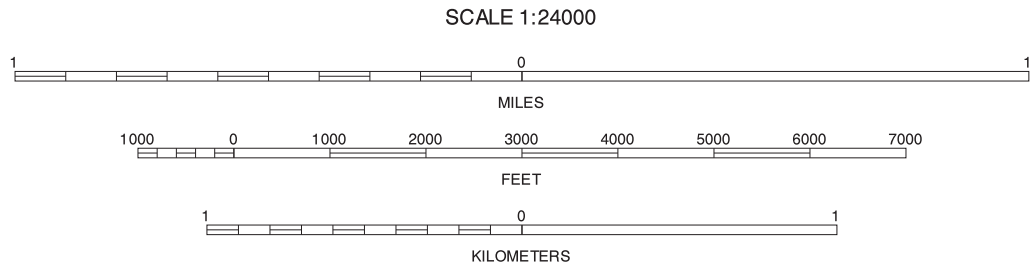
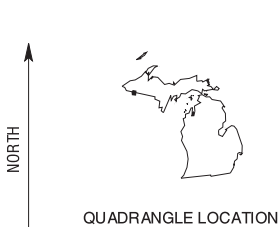
PRESQUE ISLE, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 36 OF 44

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1000-meter ticks: Universal Transverse Mercator, zone 16.
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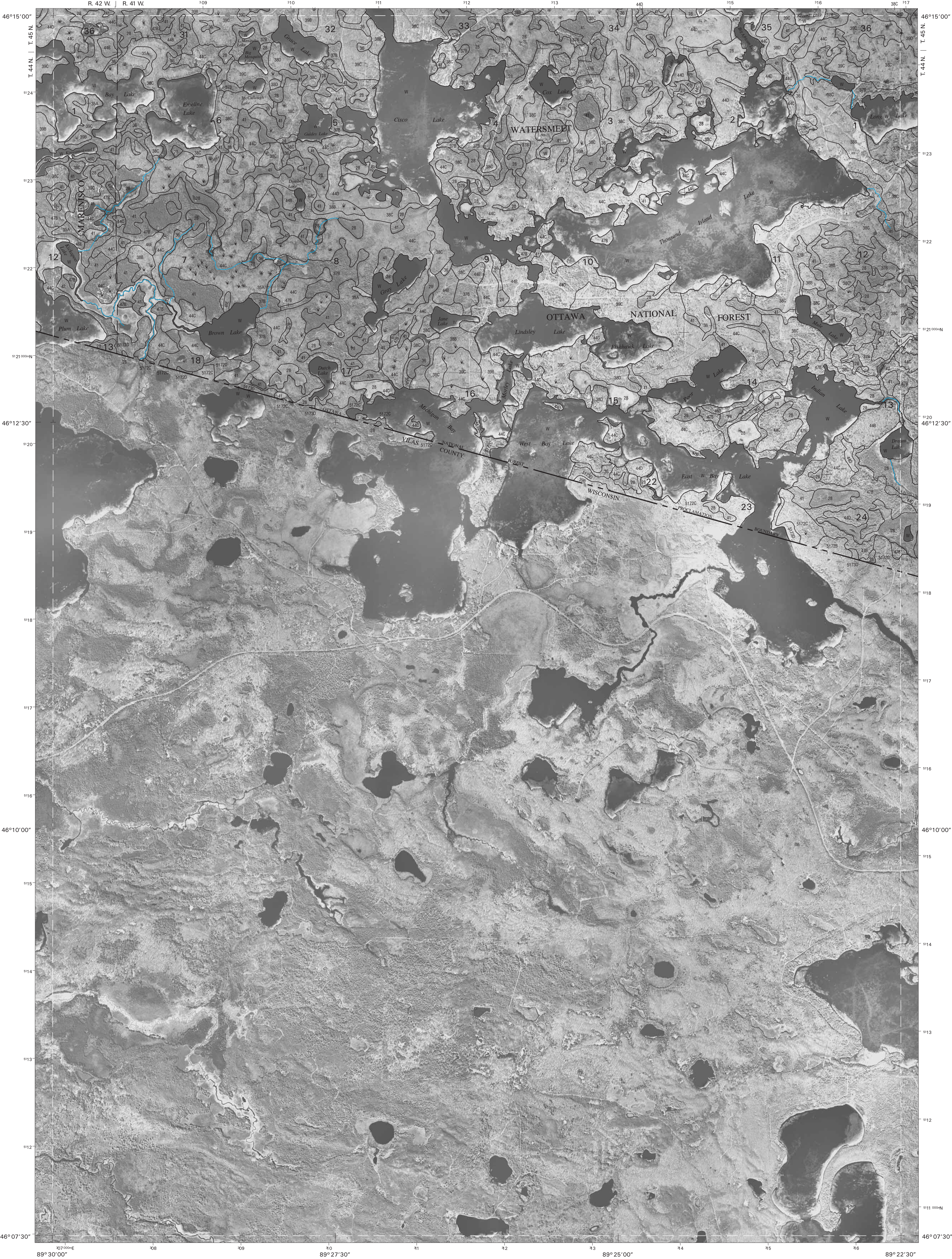


29	30	31	29 STATELINE LAKE
36		38	30 GOGEBIC
			31 THAYER
			36 PRESQUE ISLE
			38 THOUSAND ISLAND LAKE
A	B	C	A BOULDER JUNCTION
			B WHITE SAND LAKE
			C STAR LAKE

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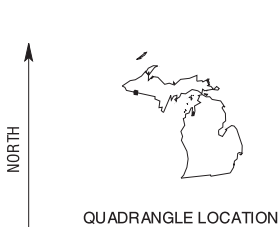
TENDERFOOT LAKE, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 37 OF 44

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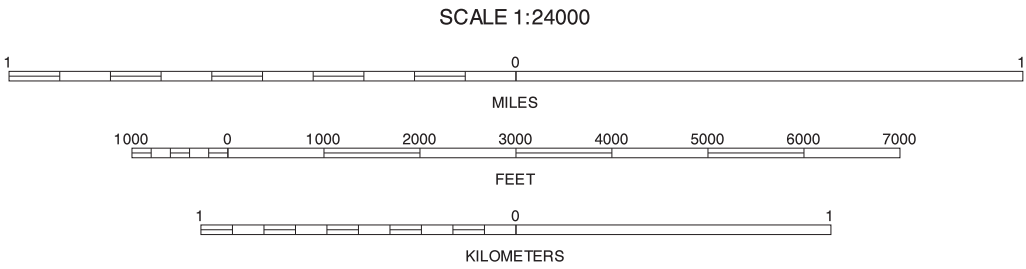


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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 16.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION

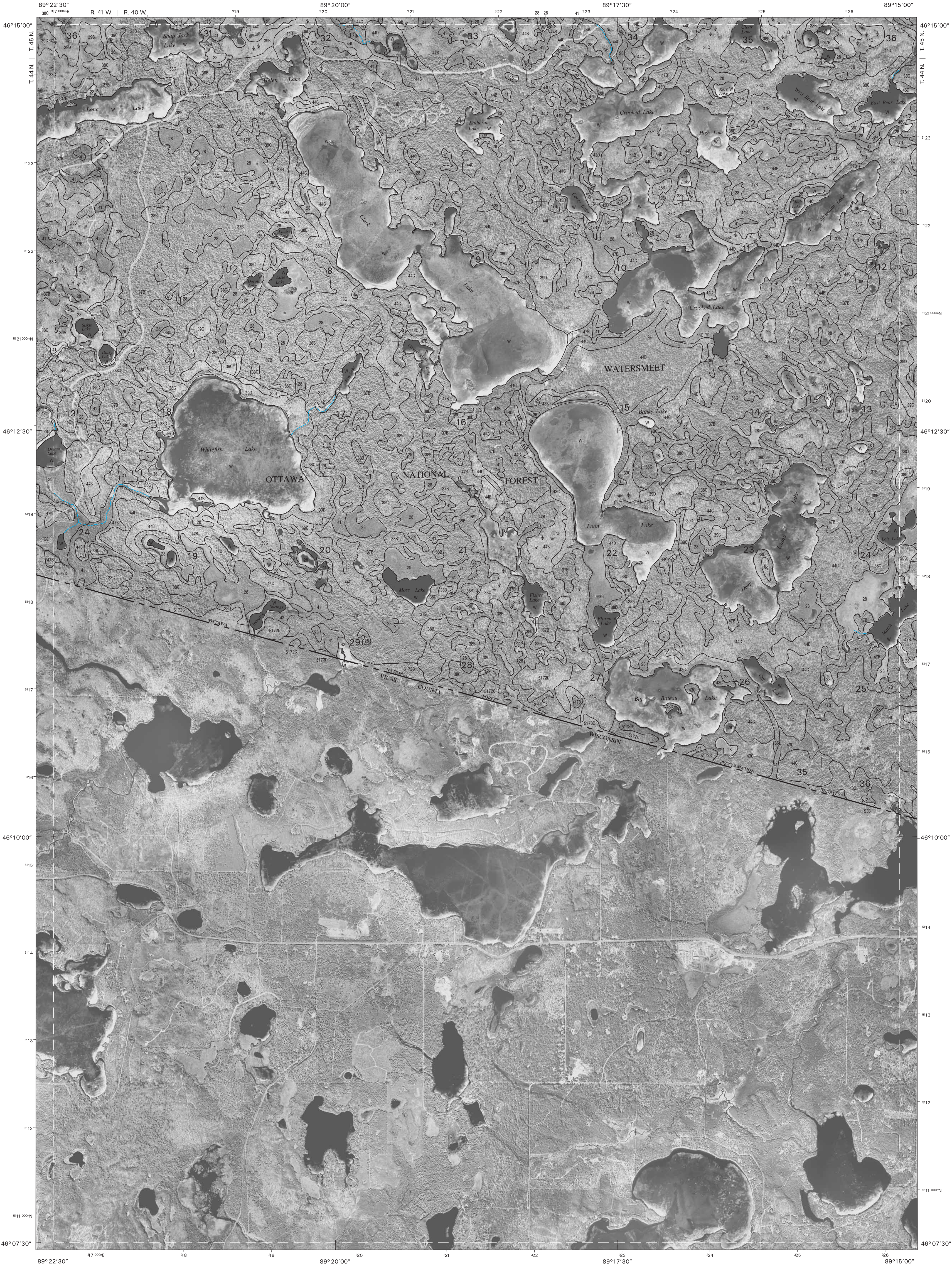


30	31	32	30 GOGEBIC
			31 HAWK
			32 BEATON
			37 TENDERFOOT LAKE
			39 BLACK OAK LAKE
			A WHITE SAND LAKE
			B STAR LAKE
			C STORMY LAKE
A	B	C	

INDEX TO ADJOINING 7.5 MAPS

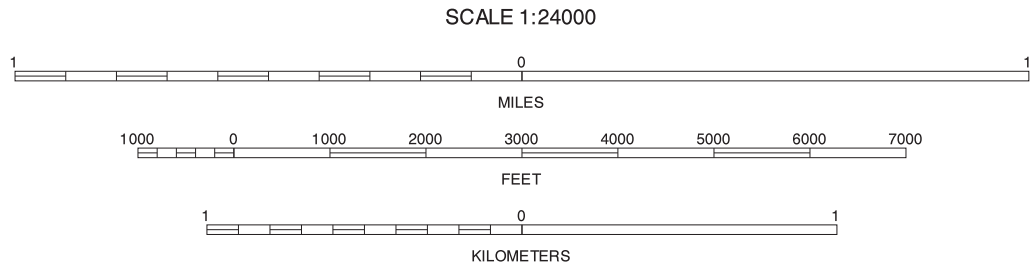
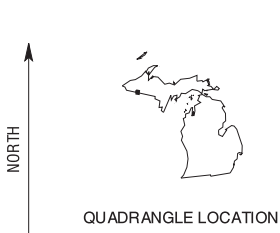
THOUSAND ISLAND LAKE, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 38 OF 44

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.



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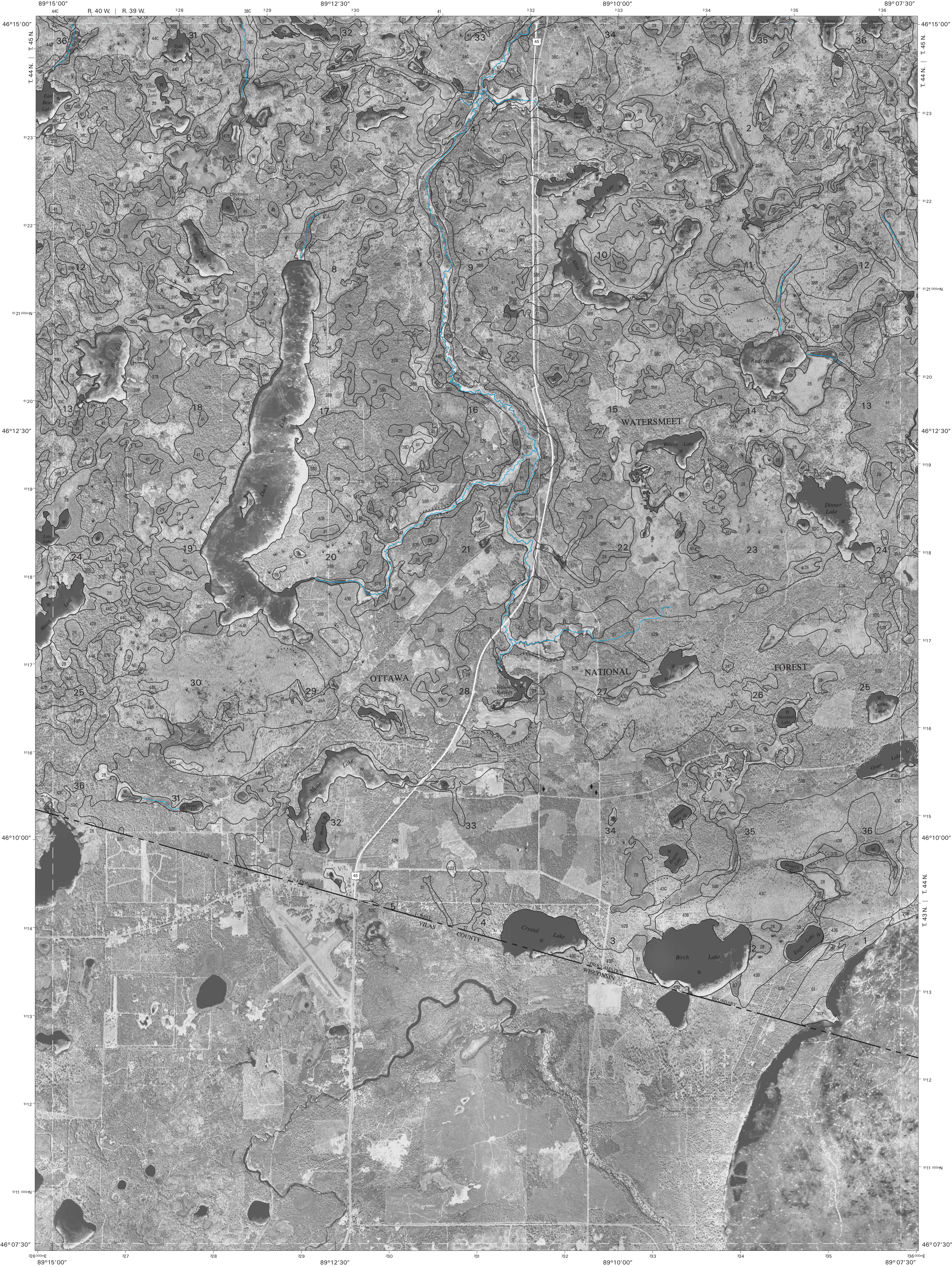
31	32	33
38		40
A	B	C

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31 THAYER
32 BEARON
33 WATERSMEET
38 THOUSAND ISLAND LAKE
40 LAND O'LAKE
A STAR LAKE
B STORMY LAKE
C PIONEER LAKE

BLACK OAK LAKE, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 39 OF 44

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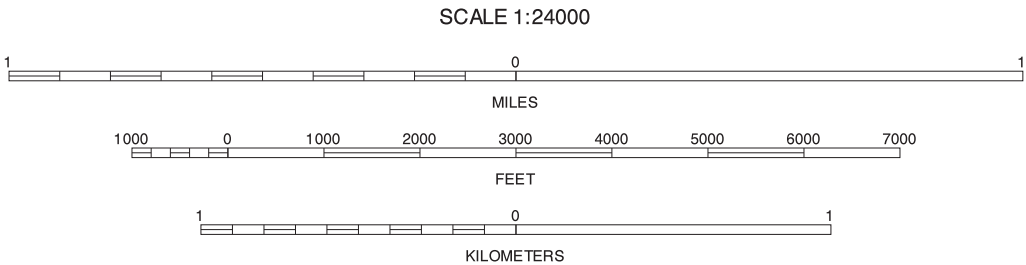


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QUADRANGLE LOCATION

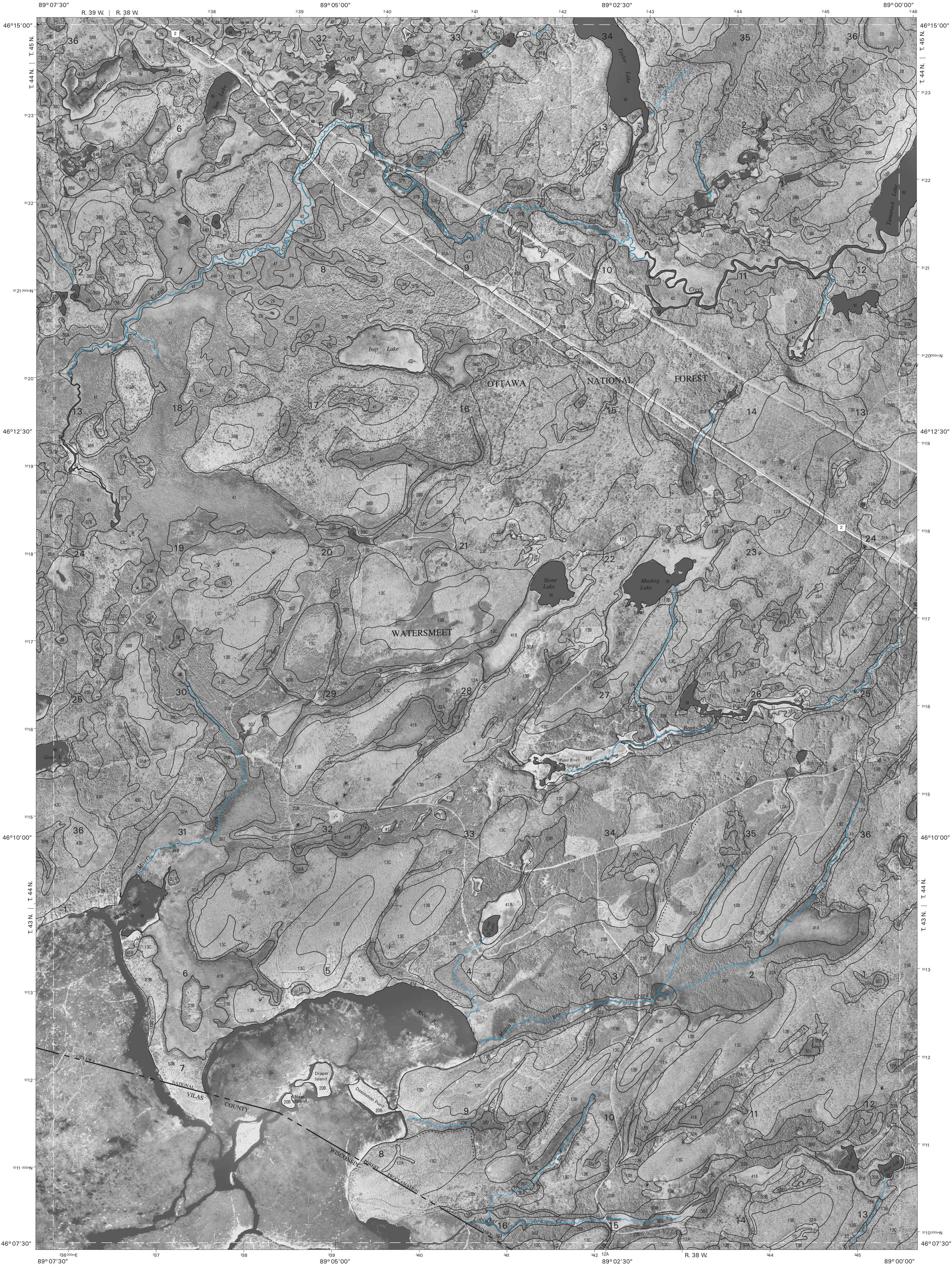


32	33	34	32 BEATON
			33 WATERSMEET
			34 FULLER
			39 BLACK OAK LAKE
			41 IMP LAKE
			A STORMY LAKE
			B PIONEER LAKE
			43 PHELPS
A	B	43	

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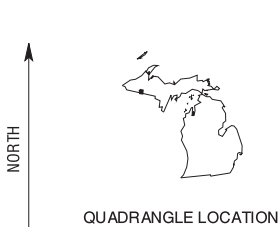
LAND O' LAKES, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 40 OF 44

Soil map delineations extending beyond the dashed white quadrangle nealline are for reference only and are included on adjacent map sheets.

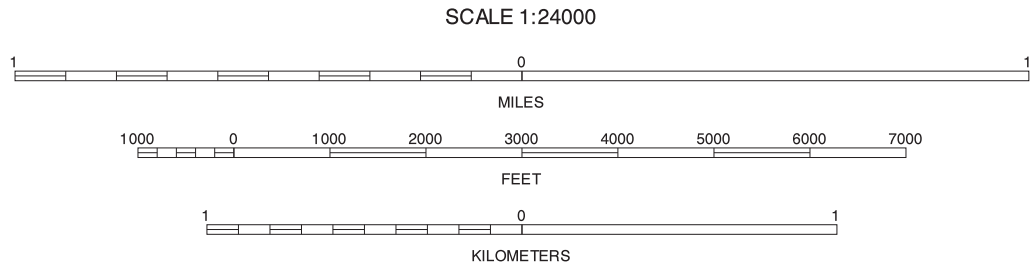


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QUADRANGLE LOCATION



33	34	35	33 WATERSMEET
40		42	34 FULLER
A	43	44	35 LAKE MITIGWAKI
			40 LAND O'LAKES
			42 GOLDEN LAKE
			A. PIONEER LAKE
			43 PHELPS
			44 SMOKY LAKE

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IMP LAKE, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 41 OF 44

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

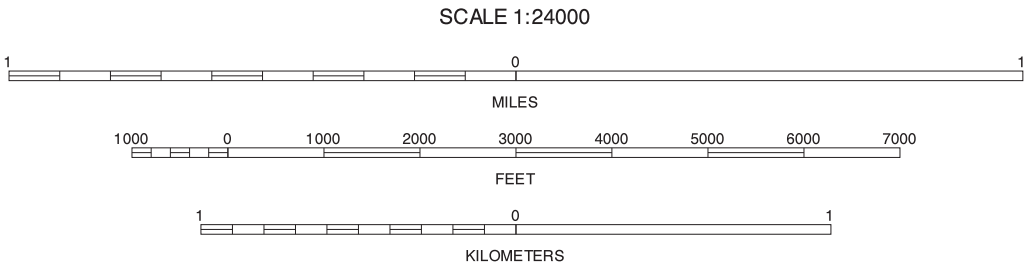


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QUADRANGLE LOCATION



34	35	A	34 FULLER
		A	35 LAKE MITIGWAKI
41		B	41 IMP LAKE
		B	42 BEECHWOOD
		C	43 PHELPS
43	44	C	44 SMOKY LAKE
			45 HAGERMAN LAKE

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GOLDEN LAKE, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 42 OF 44

Soil map delineations extending beyond the dashed white quadrangle neartline are for reference only and are included on adjacent map sheets.

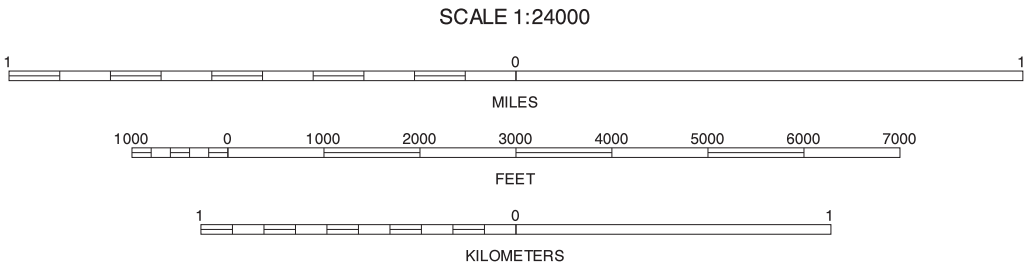


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1000-meter ticks: Universal Transverse Mercator, zone 16.
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QUADRANGLE LOCATION



40	41	42	40 LAND LAKES
A		44	41 IMP LAKE
B	C	D	42 GOLDEN LAKE
			A PIONEER LAKE
			44 SMOKY LAKE
			B EAGLE RIVER EAST
			C ANVIL LAKE
			D ALVIN NW

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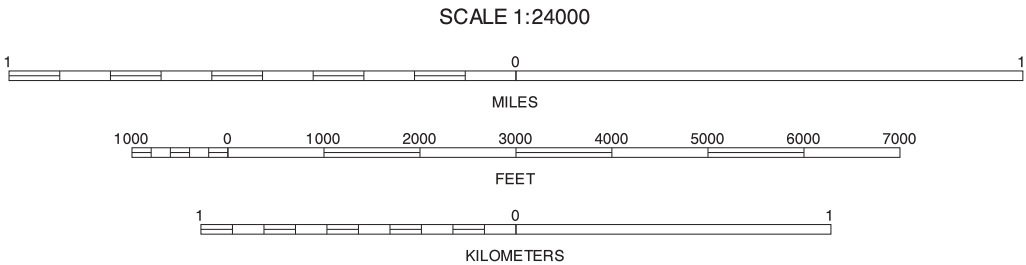
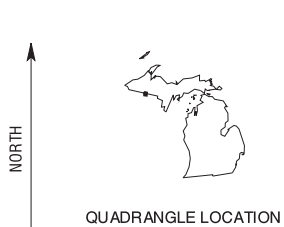
PHELPS, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 43 OF 44

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41	42	A	41 IMP LAKE
		A	42 GOLDEN LAKE
		A	BEECHWOOD
		A	43 PHELPS
		B	B HAGERMAN LAKE
		C	NAVIL LAKE
		D	ALVIN NW
		E	ALVIN

INDEX TO ADJOINING 7.5 MAPS

SMOKY LAKE, MICHIGAN
7.5 MINUTE SERIES
SHEET NUMBER 44 OF 44

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